

The essential guide for all Atari computer users

Issue 10 FEBRUARY 1996 £3.95

ATARI World

Mail it!

Mailmerge on your ST
– we show you how...

Printers

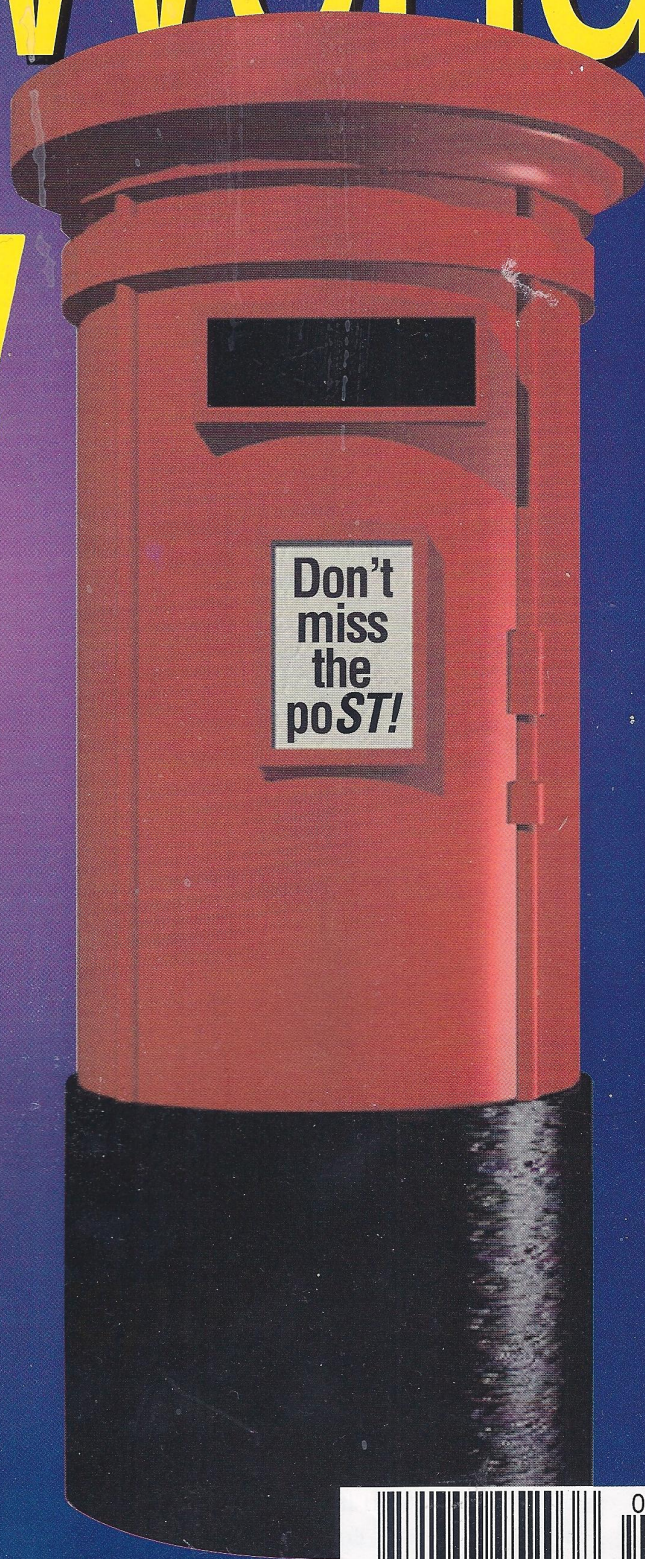
All you need to know about
buying and using a printer
in our 11 Page feature...

Show report

Missed the Atari World show?
Read all about it inside...

Reviews

● Ease 4 ● Protracker ● ST Guide ● Platonix ● 2-in-1 v1.51
● Backward v3.10 ● Tempest 2000 ● Movie Player ● UDO v4



System Solutions

Company of the Year 1994

A page full of new products and more to come in 1996

MagiC 4

"If you want a multitasking system that works simply and reliably, then MagiC is for you."
ST Review, June 1994.

MagiC 4 is a complete TOS replacement (No more TOS upgrades required!). Fully pre-emptive with very fast disk filing, faster MIDI and faster printing routines it is actually accelerating your programs. MagiC 4 comes with truly exciting new features and a completely revamped MagiC Desk.

Some of the new features are ...

- ★ Now runs on the Falcon 030
- ★ Drag & Drop (pipes)
- ★ IDE hard disk & DSP support
- ★ Additional file systems and device drivers can be loaded
- ★ Accelerated and completely re-entrant filing system with background DMA (requires HD-Driver 4.5) i.e. you can now format or copy a floppy whilst using other programs.
- ★ Writeback Daemon
- ★ Built-in routines for 3D-Look and Colour Icons
- ★ New file selector
- ★ Symbolic Links (Aliases for files)

New MagiC Desk features:

- ★ New powerful 3D look Desktop with low memory requirement,
- ★ Copy and format in the background without locking of running programs or the desktop.
- ★ Kobold support
- ★ Parallel searching with comprehensive filters
- ★ 100 colour icons
- ★ Auto locator in the Desktop and file selector
- ★ Powerful font selector for text display
- ★ Background tiling and much more....

MagiC 4 for ST/TT/Falcon £69.95
MagiC 4 and Kobold £99.95

Please call for upgrade prices.

NVDI 4

Incorporating the screen accelerator, GDOS, Speedo and TrueType font systems of the previous release, the new version NVDI 4 comes packed with lots of useful new features. Here is a short list:

- ★ Faster print routines for the parallel port
- ★ Powerful new font tool for installed and un-installed fonts to pre-view, test print, group fonts into families and to print a font listing
- ★ Print test page sizes and max. printable area
- ★ UNICODE: Pro font support (65000 unique characters per font)
- ★ Support of Windows 95 fonts
- ★ Comes with 8 new fonts not previously supplied
- ★ More Colour printer drivers, Font quality test, NOVA-VDI support and more

NVDI 4 including 8 Speedo fonts £59.95
NVDI Postscript type 1 Font Module £24.95
100 TrueType font Pack 1 £39.95
100 TrueType font Pack 2 £39.95
500 TrueType font CD-ROM £49.95

Please call for NVDI special versions, upgrade options and prices.

NVDI 2.5 is still available for only £29.95

EASE 4

How to improve your ST desktop? Take Ease 4 features (right click to double click, auto window sizing to fit contents, text and icon windows, superb colour icon editor, auto sizing RAM disk, CORRECT file checking and repair program); add new features such as the Memo Icon - to leave those important reminders on your desktop; a new File Tree Pop-Up to get through deeply nested directories fast and without opening countless windows, and more features (too many to list). Add a revised manual and you get Ease 4. Definitely a vast improvement over the original desktop.

Ease 4 - desktop replacement software £49.95
or bundle it with MagiC 4 for only £99.95
or bundle it with NVDI 4 for only £89.95

CD ROMs



Our CD ROM Systems are special

- ★ Multi-session Drive ★ Photo CD compatible
- ★ Quad Speed ★ No caddies ★ Plays Music CD
- ★ Dual SCSI port ★ Headphone socket with Volume control ★ Stereo Phono connectors

New ExtenDOS Pro 2.2

The Toshiba 4X speed drive comes complete with ExtenDOS Pro 2.2. New features include:

- ★ Direct SCSI transfer of Audio Tracks - drag samples from music CD's without sampling
- ★ Advanced Audio CD Player with Record track to hard disk feature
- ★ Comprehensive user friendly install program

FREE Mega Archive CD with every drive

4X Speed CD ROM system inc. ExtenDOS Pro for the Falcon with SCSI II Cable, or TT £269.95
for the ST(FM/e) with the ICD Link II £319.95

ExtenDOS Pro 2.2 software only £39.95

SCSI Drives



Best Hard Drive 1994
ST Review Xmas '94
MiniS hard drives are full SCSI systems, hardware compatible with all Atari, Amiga, Mac and PC computers. They are unrivalled in size, low noise, speed and style. The ST(FM/e) version now comes with the ICD Link II as standard, or choose the Translator with HD Driver. Also included are terminators and all required cables.

We will match prices but won't compromise quality
Gold Award of 93% - ST Format Feb. '94

Essential Buy of 92% - ST Review Christmas '93

- ★ Quiet fan ★ Internal Power Supply 100-240V
- ★ 2 Year Warranty ★ Small (2.5x6x8.5") (WxHxD)
- ★ Dual SCSI Port ★ Device Number Switch

		TT/Falcon	ST(FM/e)
80Mb	IBM	£139.00	£189.00
127Mb	Quantum	£199.00	£249.00
270Mb	Quantum	£219.00	£269.00
540Mb	Quantum	£279.00	£329.00
850Mb	Quantum	£309.00	£359.00
1Gb	Connor	£349.00	£399.00
2Gb	Connor	£759.00	VAT Included!

SyQuest EZ Drives

The new Syquest EZ 135 drive is available now. Use it as your first drive or as a fast backup system. Peace-of-mind two year warranty on the drive and five years on the cartridges.

EZ135 Inc one cartridge £219.00
Extra cartridge £17.95
Three cartridge pack £49.00
Five cartridge pack £79.00

HD Driver 4.5

The fastest Hard Disk Driver software just got better. Now you can write-protect individual boot/root sectors, change the boot sequence if you have more than 1 drive, and most importantly can multitask Hard Disk access under MagiC 4. On the Falcon partition sizes of 1Gb are supported.

HD Driver 4.5 £29.95

MAIL ORDER,
Fax: (01753) 830344
Windsor Business Centre, Vansittart Rd, Windsor. SL4 1SE

(01753) 832212

SHOWROOM,
Fax: (0181) 693-6936
17-19 Blackwater Street, East Dulwich, London. SE22 8RS

(0181) 693-3355

Prices include VAT and may change without notice - UK P&P £3.95 - Multiple or large items, add £10 courier. E&OE

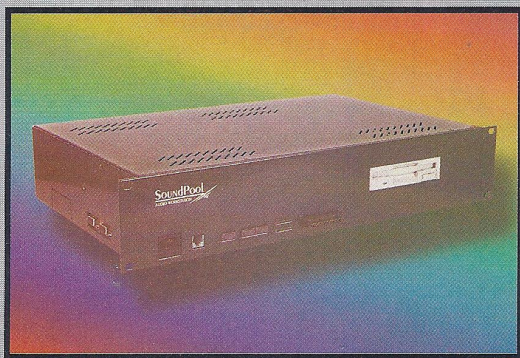
With two service centres and Atari trained engineers at your service, the Atari Workshop is now Atari UK's preferred and recommended service agent. Need it back in a hurry? Ask for our next day ProService. Call us for estimates and to discuss your upgrade requirements. We fit all quality upgrade products. Ask for our Courier collection and delivery.

Call Windsor on (01753) 818816, or London on (0181) 693-1919.

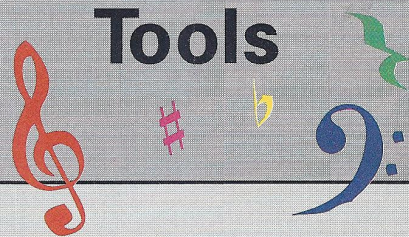
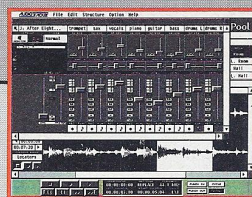
ATARI

WORKSHOP

SoundPool Pro Audio Tools



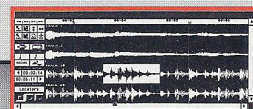
The SoundPool Audio Workstation has been designed for professional studio use. The 19" 2U Rack integrates the Falcon030 computer, Hard Disks, DAT I/F & extra MIDI outputs.



Audio Tracker

8 Track Hard Disk Recording Software.

A 4, 6 or 8 track digital recording system with built-in mixer and digital effects processor designed to meet demanding real-life studio situations. Audio Tracker generates and synchronises to MIDI Time Code and allows MIDI remote control. Well suited for professional video post production and an ideal companion for Cubase and Notator. Price £159.00



Falcon CDR Software

Press your own Audio CD's on the Falcon 030. The software manages audio files (AIFF, AVR and WAV) to create 'Red Book' compatible CD's. Features include PQ Editing, Selectable Pre-Emphasis, Copy Protection for each track and more. Available from only £159.00. Ask for complete CDR systems.

Realtime FFT Analyser and Peakmeter

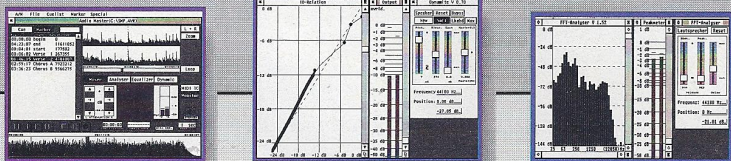
Precision measuring software for frequencies from 5Hz to 48KHz with linear, logarithmic, 3rd band and 'Sonogram' modes. Can be used with AudioMaster or as a stand alone program. Price £199.00

Dynamite - The Dynamics processor

The freely adjustable I/O curve allows the software to work as a compressor, expander, limiter or noisegate simultaneously at different level ranges. Can be integrated into AudioMaster. Price £199.00

ADAT Interface

The missing link to ADAT 8-track recorders, FX units, synthesizers, samplers and mixers. The Falcon can now record up to eight tracks simultaneously. £495.00



Audio Master

Stereo Digital cutting and pre-mastering Software for musicians, producers and sound engineers who want to get the best results from their recordings. Scrubbing, non-destructive editing, markers on the fly, bar editing, crossfades in realtime and more. Audio Master can be expanded into a complete audio mastering workstation with optional DSP software modules (6 parametric equalizer, Compressor / Limiter / Gate, Analyser) eliminating the need for costly U-matic pre-mastering facilities. Price £229.00



FDI - DAT interface

The vital link to DAT recorders, CD players and the exciting Yamaha ProMix 1. Compatible with Cubase Audio and Notator Logic. £229.00



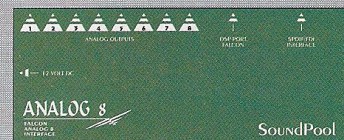
Four extra MIDI outputs

64 additional MIDI channels compatible with Cubase and all Atari Computers. Comes with M.ROS driver. £149.00



Analog 8/4 Interface

FA4 £199.00
FA8 £349.00



4 or 8 high quality 16 bit Digital to Analogue converters with linear frequency response from 20Hz to 20kHz and line level output to meet professional recording standards.

All prices include VAT

To order and for more information
or FAX 0181 693 6936

Tel: 0181 693 3355

☐ I am interested in the Audio Workstation ☐ Please send further information ☐ I own a Falcon please send the demodisk

Name: _____ Telephone: _____

Address: _____ Postcode: _____

Post to: System Solutions
17-19 Blackwater Street,
London. SE22 8RS

System Solutions

More quality music products from



A quality exxos scan 01/05/98

System Solutions is a trademark of Brandt Fernandes (Europe) Limited. Company registered in England 2612998

http://exxos.www.idnet.com/IMPULSE/atari/last/

contents



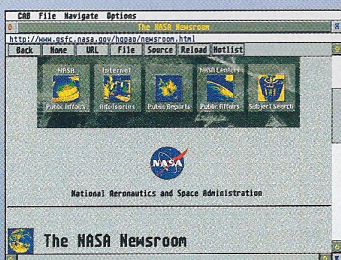
FEATURES

16 Show report

Read all about the Atari shows in London and Birmingham.

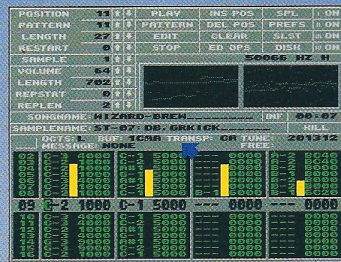
25 Ground breakers

Joe Connor looks at ST Guide.



28 Basic

Ofir Gal with the third in his Basic series.



REVIEWS

18 Ease 4

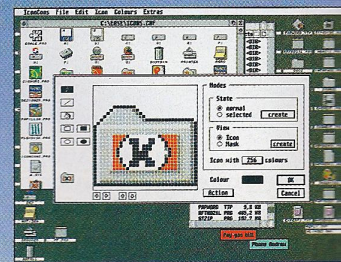
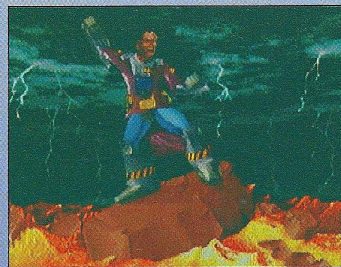
Ofir checks out the latest incarnation of this popular replacement desktop.

20 Protracker

Shiuming Lai reviews a superb tracker program.

27 Platonix

Games, games, games with Graeme Rutt.



35 Book review

Ben Hall thumbs through some essential reading for musicians.



42 Defender 2000

Iain Laskey with more classic Jag stuff.



STSource

Printing with Atari

43 Printers

Everything you wanted to know about printers but were afraid to ask.

REGULARS

6 News

What's news on the Atari scene.

10 Letters

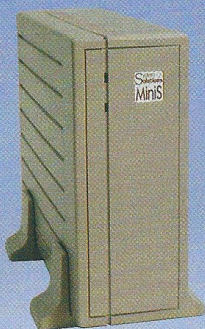
Grumpy gets to work again.

15 Reader Disk

More goodies for you to enjoy.

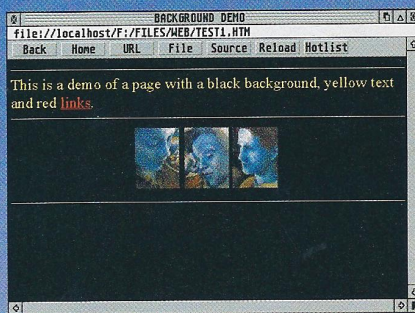
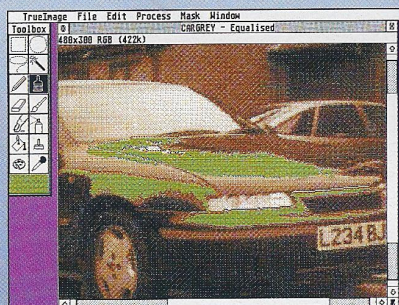
37 Inside the ST

Disk drives get the Paul Rossiter treatment this month.



40 Image Processing

Gunter Minnerup continues his tutorial.



76 News from the Wire

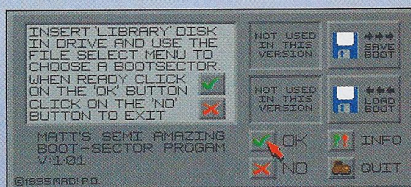
We finally decide on a name for Graeme Rutt's comms column.

78 Never mind the language

Programming theory with guru Jon Ellis.

81 PD Arena

The best PD pages you'll ever see, with Joe "Try-before-you-buy" Connor.



88 PD Arena Games

Nial Grimes gets up and at 'em.

92 Q and A

Your questions answered by our technical team.

75 Clubbin'

Harry Sideras hits the road again.

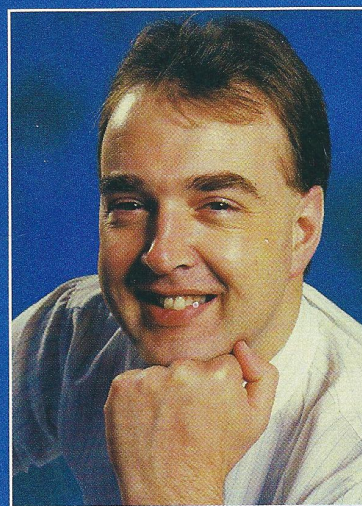
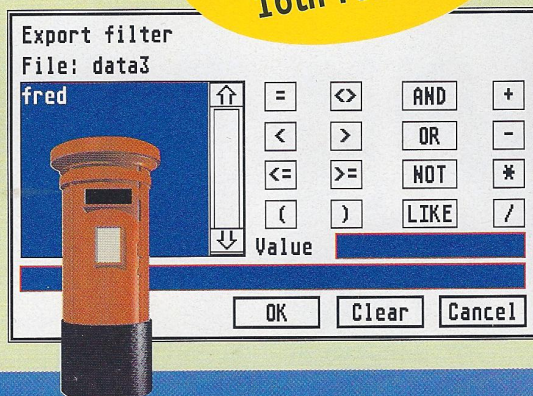
Don't miss the
March issue on sale
16th February

ATARI Pro

Mail Merging
with your Atari

59 Mail merge

Mail merging laid open to the bone.



HAPPY NEW YEAR

Hello again and Happy New Year to you all. It was really nice to meet so many of you at the London and Birmingham shows and I'd like to offer my personal thanks for turning up in big numbers to tell us what you felt about the mag and the way things are going. All I can say is that I'm really looking forward to the next ones.

What will 1996 bring us? Peace on earth? I doubt it despite the fact that the world's troublespots are relatively quiet. A general election? Quite possibly but I won't be betting on the outcome.

A good year for Atari? I doubt that too, quite frankly, because the Jag is already fading fast in the face of stiff competition from the big boys like Sega and Sony.

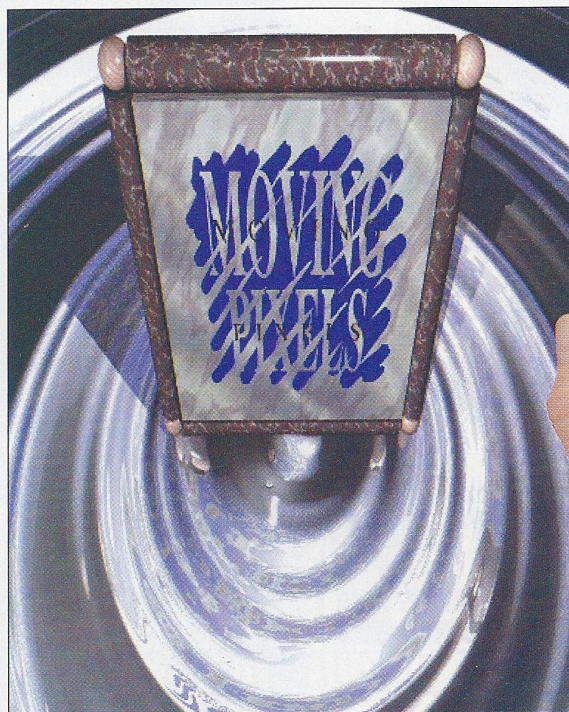
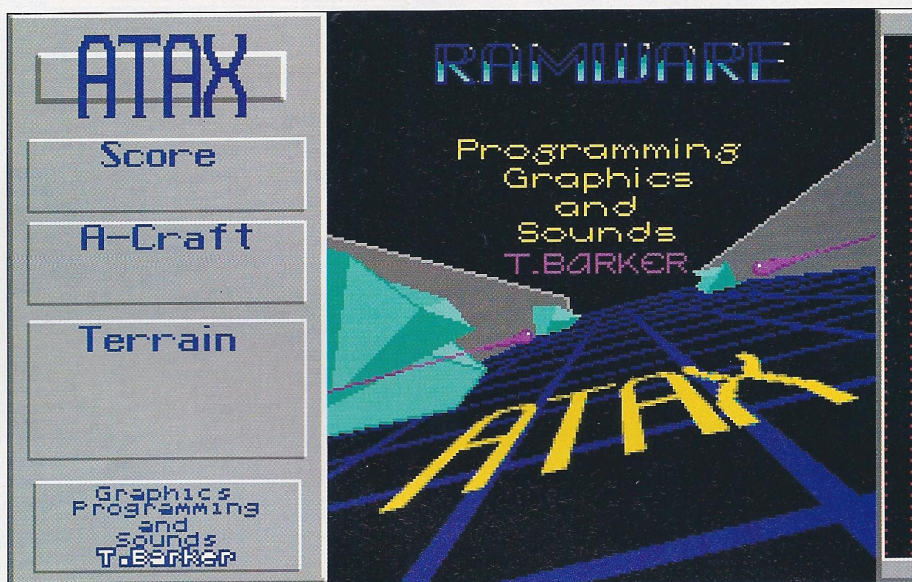
A good year for Atari users? Now that's more like it - Atari the company might well be irrelevant but Atari is also the name on thousands of TOS based home computers out there, and the shows have proved that the Atari community is very much alive and kicking. The market will continue to shrink but if we're careful and plan for just that to happen, we'll see it through. By that I mean we band together in local or specialist user groups, stay in touch by telling each other what's going on, and make sure we give the maximum support to those vendors who have remained loyal to the sign of the Fuji. That famous logo may no longer conceal an active volcano but it's by no means extinct.

Andrew Wright

Andrew Wright, editor

NEWS

CD'S ON THE UP!



Moving Pixels was responsible for classics such as Atax on the ST.

The CD revolution is well underway on the Atari platform with dozens of new titles appearing each month. 16/32 Systems (01634 710788) has announced several new CD ROMs dedicated to Atari users.

The first is a collection of PD and shareware software entitled All Things Falcon and it has been compiled specifically for use with Atari and C-Lab Falcons. All the files contained on this CD are either Falcon specific or 100% Falcon compatible and the CD costs £16.

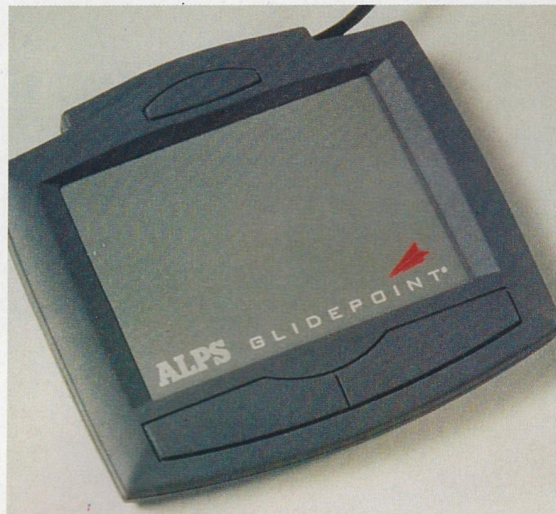
Electronic Spinster Graphics has been providing quality clip art to the Atari market for some time. Now, for the first time, the company's graphic collection is available on one CD. Unlike other clip art CDs, this one is aimed specifically at the Atari market. All images are provided in IMG, CVG, or GEM format for use with Atari applications and over 6,000 IMG files and over 1,000 CVG files are included covering a range of topics. The ESG CD costs £16 from 16/32.

16/32 is also offering Volume 1 and 2 of the Crawly Crypt series on one CD. All files are comp-ressed and BBS ready with standard BBS file lists on the CD for all files. This is a great CD for a club librarian, BBS operator or anyone looking for 1.2 gigabytes of Atari files on a single CD. It costs £45.

Also available is an enticing CD called The Moving Pixels Collection costing just £11. It includes the best programs and source code from Tony Barker and Moving Pixels Software, direct from Australia. The list includes Atax, a space shoot em up for the ST, Brushworks, a TT paint package and Chambers, another ST game. Demos include the classic STE Boing, TT Wars, and Official and Tina for the Falcon. The CD also includes dozens of uncompleted and unreleased programs and source code - if it's been on Tony Barker's hard drive, it's on this CD.

US users can order the same titles in the US from It's All Relative, 2233 Keever Lane, Florissant MO 63031 USA or telephone 001 314 831 9482.

DESKTOP GLIDER



If you read the review of the ALPS Glidepoint in AW5 (September 1995 issue) you'll know how impressed the *Atari World* staff were with this innovative new mouse replacement product. Indeed we received more telephone calls at the office asking about this product than any other to date, so I can only assume you were as impressed as we were.

You'll be pleased to know that ALPS has launched a desktop version of the Glidepoint device with a 40% bigger touchpad and an adjustable base.

The Glidepoint was originally launched back in April 1995 as an add-on for portables and manufacturers very quickly started building the devices into portable PCs and Macs. However desktop computer owners were quick to see the advantages and it has already proved perfect for older users with limited arm movement or those with arm or hand disabilities. The bigger pad size will suit many people, particularly as the desktop model has an adjustable,

tiltable base with three different angle settings. Apparently you can also pivot the Glidepoint around the base for an additional four positions or remove the base entirely and use it flat on the desktop.

To select something with Glidepoint requires just a quick tap with your fingernail on the surface and this is interpreted as a mouse click, making selecting from menus or icons incredibly easy and intuitive. The resolution of the device is 400 dpi. It is a direct replacement for the PC mouse, requiring no extra driver software, which means Atari owners can plug it into the serial port using a simple adapter and a drive it using a utility such as Mouse or Mousertricks, as described in AW5. There is also a Mac version of the device working with System 6.04 and above.

Glidepoints are available from ALPS on 01344 873853.

NEW USER GROUPS

After the discussions at the recent *Atari World* show in Birmingham about user groups and banding together, it's nice to see that the first fruit seem to be appearing. A new user group has been launched for the West of Scotland by Alasdair Goold, to be known as the WSAUG. The group's aim is to provide support for and to foster communication between Atari computer owners in the West of Scotland, to provide timely information about Atari news, products, vendors, and service, and to find solitary Atari computer owners and encourage them to join the group.

The group will hold meetings, at a venue still to be decided, on a monthly or 4 weekly basis. It is hoped that the user group will run either a monthly or bimonthly newsletter for its members. Once an idea of numbers has been established and a premises secured, notification will be sent to all those who have replied with the date and location of the inaugural meeting.

The group will be open to all Atarians or former Atarians regardless of experience or equipment. The WSAUG will be a non profit making group and will be affiliated to the UK Association of Atari User Groups.

All enquiries should be sent either by email to agoold@cix.compulink.co.uk or by mail to the West of Scotland Atari User Group, Roisbheinn, Overton Crescent, Johnstone, Renfrewshire PA5 8JB (with an SAE please).

Brian Coplin, a second year computer science student at Swansea University and the President of Swansea Computer Society, is looking to set up a similar user group for those in South Wales. He hopes to have the enterprise off the ground by mid-January 1996 and it will include several Worldwide Web pages and a newsletter for members.

For interested browsers the existing Web page address is ramps@sunacm.swan.ac.uk. The newsletters will be made available by email, on disk or paper, and all that is required is an SAE. Depending on the response, Brian is even hoping to organise a few shows and get together later in the year at various universities in South Wales.

Those interested should drop Brian a line by email to ramps@sunacm.swan.ac.uk or mail to Brian Coplin, 20 Bryn-y-mor Crescent, Uplands, Swansea. SA1 4QH.

Atari World wished both user groups the best of luck. And don't forget to keep Harry Sideras informed at the UKAAUG!

UK AAUG RELAUNCHED

The UKAAUG - Association of Atari User Groups - has been relaunched following the resignation of the founder, Ken Ward after 15 years of sterling and much appreciated work on behalf of Atari 8-bit, ST and Falcon owners and various user groups. *Atari World's* very own Harry Sideras, the Clubbin' columnist, has stepped into the breach and taken over the running of this important umbrella organisation.

The primary purpose of the UK Association of Atari User Groups is to maintain a directory of other user groups and their contact details in order to enable individuals to join an existing network of support. Advice and encouragement is also available on creating new groups in areas where they don't currently exist. The directory will also contain information on groups that support Atari software, Atari publications (both printed and on disk), PD Libraries and Atari Bulletin Boards, FTP and Web sites.

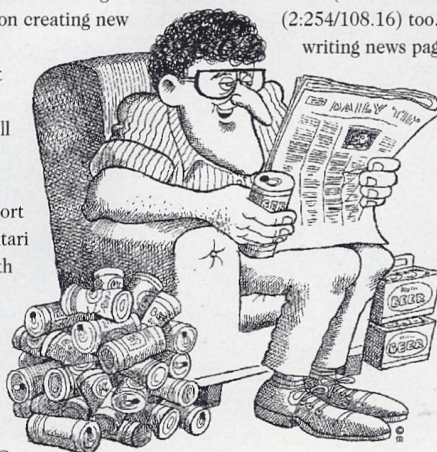
The UK AAUG

will continue to operate on a non-profit making basis, so all postal contact requiring a response must be accompanied by an SAE and disk.

All organisations that need to be listed in these directories should contact Harry by one of the methods below to ensure up-to-date details.

Harry Sideras can be contacted by mail at 49 Haywood Road, Tile Cross, Birmingham B33 0LJ (Remember the SAE and disk). You can also get to him via the Internet at sidclery@cix.compulink.co.uk or hsideras@mettav.demon.co.uk. As if that wasn't enough, you can try NeST (90:102/143), TurboNet (100:1011/143), AtariNet (51:502/100.16) or FIDO (2:254/108.16) too. Let me tell you,

writing news pages was a lot easier when we only had the GPO...

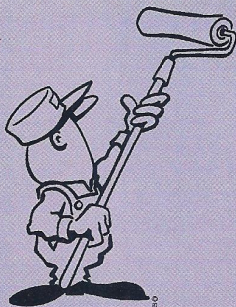


SNIPPETS

System Solutions has announced the availability of two more Epson Stylus printers. They are designed for the professional colour layout market and are ideal for final proofing. Using Epson's proprietary Microdot and Microweave technology, the two inkjets provide the best colour printing currently available from an inkjet printer. Smaller dot-size and better ink delivery have eliminated the problem of banding and provide high quality photo-realism. Both printers go up to 720 by 720 DPI and print at 1.5 pages per minute in colour and 3 pages per minute in monochrome. The Epson Stylus Pro A4 is £569 including VAT and the wider-bodied Epson Stylus Pro A3 is £1874 including VAT.

Following the unequivocal success of its brand new 100Mb Zip drives, Iomega has set up a European customer support centre in Dublin. All calls are free and UK users of Iomega products can call them on 0800 973194. However, if you're after Atari specific advice, HiSoft is Iomega's official Atari distributor on 01525 718181.

Hewlett-Packard has dropped the price of its new Deskjet 600 and 850C inkjet printers by 4%. The 600 now costs £243 and the 850C £440 though street prices are likely to be much lower. If you want to see the quality for yourself, you can order print samples by calling 01344 369222. Sales information is available on 01344 369222.



Control four characters independently in Aronath.

TOP DOWN FROM TOP BYTE

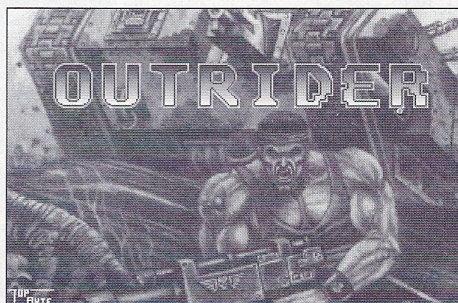
Aronath is the latest release from publisher Top Byte Software (01622 763056). It is a top down role playing game that draws influences from Nethack and Gauntlet and an interface that owes a lot to the Cannon Fodder. Each player controls up to four characters, selected from a pool of around 20. Up to four computers can be linked together for competitive play and a number of extra options are available in this mode, including the ability to spy on each other and send secret messages around the network.

As well as the usual hand to hand combat, a fair amount of strategic thinking is required. Some opponents are easily killed in battle, while others are neutralised using the various traps which can be collected, or by casting spells. What makes Aronath that bit different from other games of this genre is its ability to control the four characters individually, sending each on a different route. The 'follow the leader' approach is also supported but individual control opens up the possibility of cross-fire and ambush type tactics, adding excitement to the gameplay.

Everything in Aronath is controlled by simple mouse clicks and key presses. Palette switching techniques are employed to achieve more than sixteen colours on screen and extensive use is made of sampled sound effects. Aronath has ten levels, each of which is no less than 100 screens square! It runs on all Atari computers but is more comfortable on machines with at least 1 Mb of memory. The price should be around £20.

Following Top Byte's success with Stario Land - and the seasonal follow-up Stario's Christmas - the hard-working developer has another in the pipeline. Space Ace Stario is due out soon and should provide yet more platform levels for gamers who just can't get enough. The Stario games will retail at £14.99 each (plus £1.49 for overseas postage).

Outrider is another good-looking title that should be out soon too. For further details contact Top Byte Software, 3 Salisbury Road, Maidstone, Kent, ME14 2TY or telephone 01622 763056.



Outrider - The latest God game for the Atari.

GAMES ON THE GO



Fight and bribe your way to the top with ESLA III.

Not to be outdone, Merlin (01452 770133) has acquired UK distribution for a German football management game called ESLA III. Based on the European Sunday League, ESLA III is a dual language game in English and German with dozens of configurable options and a wide choice of fictional teams to take through the league or cup to victory.

You play the part of the team manager looking after practice sessions, player positions, payments (to referees as well as players!) and tactics. If you keep up with the targets set by the game, you can go on to cover yourself in glory. The game has too many options to list and is supplied on two disks with a short (but English) manual. Hard disk installation is possible and the game works on any Atari with at least 1Mb of RAM and a colour monitor or TV. If you're into football games it looks like a good bet and it costs only £19.95.

Merlin has also announced another new arrival in the form of shareware game Deadland. It is available on disk MPD2-40 and needs a 1Mb STe or ST. It is very similar to games like Breach and Cannon Fodder and the sound and graphics are of extremely good quality. Watch out for a review in PD Games Arena soon.

THE SEARCH IS OVER

FAST • EASY • SAFE • PORTABLE • UNLIMITED STORAGE



Affordable

**IN
STOCK
NOW**

The EZ Drive is the affordable way to free up space on your computer, make fast reliable back-ups and work with large files. Each cartridge holds 135MB yet is small enough to fit in your pocket. Syquest's proven reliability, hard-drive speed, and unlimited storage has made Syquest drives the world's number one selling high performance removable storage device, and your number one choice!

EZ Drive complete with SCSI cable £199 inc VAT
EZ Drive with Toplink £249 (For ST owners without a SCSI Hard Disk)

To order call 0181 345 6000

We have moved Please note our new address

GASTEINER

Address 18-22 Stirling Way, North Circular Rd, Edmonton, N18 2ZY

E&OE

Letters

Hot under the collar

Steve Bradshaw's letter describing the modification to the Sony MPF 520 was a super piece of generously offered information. Unfortunately he did not specify the values of the resistor and capacitor used. I have tried a 1k resistor in series with a 100n ceramic capacitor on both my drives A and B with complete success. Many thanks for this particular fix-it!

However, Andrew Wright's recommended fix for the noisy Megafile 30 fan is not altogether clever – as he himself acknowledges. There are two better solutions. The rather excellent – and since moved on – Keith from Compo once told me that a low value resistor of around 100-200 ohms (1 Watt) wired in series would slow the fan down and reduce the noise to something more acceptable. Maybe so. Moreover this will only cost the princely sum of 10p!

A better solution is to buy a completely new fan. Modern ones are much quieter. Greenweld Electronics supply some belting little numbers for the princely sum of £3.00 (Order reference no. X6015 – phone number 01703 236363). Two of these beauties are currently installed in my tower case – these disturb my Cubase activities not one iota – while a third operates virtually silently in the Megafile 30 at my workplace.

So Andrew, when your Megafile's PSU packs up through overheating and neglect, you can look back on this letter and realise that at least you gave everybody else the chance to avoid your own momentary inconvenience...

Richard Harrison, Halifax

Ouch. That's got me told. Thanks for the tips though. Oddly enough the very same gentleman you mention did a similar sort of magic trick with my Falcon a year or two ago. The fan was extremely

Right to reply

Put pen to paper and speak your mind in **Atari World's** letter pages...

noisy and when it was in getting a Matrix Screeneye card fitted for review purposes, he slipped a resistor in somewhere and the problem was cured. It took your letter to jog my memory but I can vouch for it being a good idea and well worth investigating. At least, it's a good idea if you know what you're doing. I rashly bought a soldering iron a few weeks ago from Argos to try and repair a null modem cable. Nightmare...

Missing Lynx

May I suggest you visit my Atari Lynx web page? It is a very comprehensive source of information for all Atari Lynx fans. It is best viewed with Netscape (1.2N and above) and can be found at:

<http://www.ereal.com/eds/>
<http://www.ethereality.co.uk/eds/>

I forgot to mention that I am 13 years old, have every issue of Atari World, and created the entire page myself, with NO help. I don't want to brag, just try to show you my never ending Atari support.

To get to the point, I want to write a Lynx column. I feel the magazine would benefit greatly from it, and I always have a lot to say about the Lynx. Some topics I could write about are:

1. The closing down of Hand Made Software, long time Lynx developers.
2. The sad passing away of Jeff Minter's dad.
3. A feature on great upcoming Lynx games such as LOOPZ and Marlboro Go!
4. My Lynx page.

5. The release of the two new Lynx games, Battlezone 2000 and Missile Command/Super Asteroids Double Pack.
6. The new Atari web page.
7. The idea that is being passed around of hooking the Lynx up over the Internet for multi-player games.
8. Lots of Jaguar related news.
9. Info about the Eye Of The Beholder Lynx cart, and why Atari are holding it back.
10. I will also be the second person in the world (except for the games producers) to know about the Battlezone easter egg. Not even Atari know it's in there, and I shouldn't have told you. Don't tell anyone.

As you can see I always have plenty to say about the Lynx, and I have screen shots of every game mentioned here. If you are interested in me writing an article, even if it is just a one off, please let me know.

Edward Castle (ecastle@cheri-ta.win-uk.net)

It's hard enough convincing most Atari users that we should continue to cover the Jaguar – trying to convince them we should cover the Lynx would be downright impossible! Believe it or not some of them even get cross about Falcon coverage! And what about the old 8-bit Atari's? Should we cover them too?

No, it looks as though the majority of our readers want plain old Atari computer articles and can't really be bothered with frivolities like the Jaguar or the

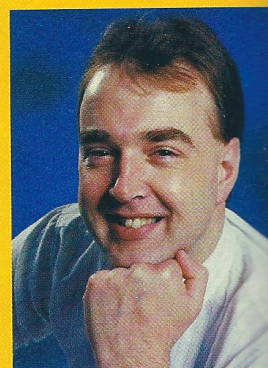
Lynx. They don't mind being kept up-to-date on Atari events and happenings but only out of interest – what happens to Atari now is pretty much irrelevant to ST and Falcon owners.

Anyway, you've had your brief moment of glory – I'm sure you'll get a few more visitors to your Web site – and who knows? They might even be using STs and the CAB browser!

Great show...

Congrats on a great show. My subscription copy of AW 9 was given to me as I came through the door (a week early). The show was full of upgraded machines in a variety of cases, showing off excellent software all from third parties. It seems the best thing that has happened to the Atari platform is that Atari have pulled out. Loads of powerups and enhancement hard and software was on offer. My friend got the bargain of the day – a 1 Mb STE

Write On...



Got something to say? Think I'm too grumpy? Or maybe too lenient? Hate the look on that smug, smarmy, self-satisfied face? Don't blame you. Write to me at Atari World, either at the address at the end of the magazine or via e-mail to andwright@compulink.co.uk.

with TOS 2.06 for £35 and four 1Mb SIMMS for £70. What a git.

Regarding my letter printed in AW9 – seeing the price and power available to even the meekest of STs and comparing it to the cost of an equally powered system on the Mac or PC, I'll be sticking with the Atari platform, thank you.

PS Have you any AW binders and if so how much?

Mahn Davis, London NW1

I'm glad you liked the show and your friend undoubtedly did too well. A 4 Mb machine with an up-to-date TOS for just over the ton is a bargain indeed. I assume you meant to say, "what a gift" rather than "what a git" but then again, I don't know your friend... Regrettably we don't have any binders at present but it is something we're looking at.

Illuminating

Firstly I want to thank you for hosting the recent Atari show, which I attended, in London. It was illuminating and enjoyable – not least the seminars. Also most enjoyable is the magazine itself; I find the balance and level much to my taste and look forward to each edition. I have experienced the common complaint of not easily finding a copy on the stands and at last have had the good sense to subscribe.

Leon Cohen, London N2

Thank you for your comments – your letter is one of many on the subject and it's obviously nice to get some feedback to see what our readers think of us and what we're doing. On the subject of the seminars, it was as much a new experience for me as it was for you. Though the vast majority of you seem to have thoroughly enjoyed them (as I did), a few people commented that they thought they were pitched rather more towards the beginner than the average knowledgeable Atari user. Anyway, the show was a resounding success and there will undoubtedly be another one, perhaps in the Spring.

Unnecessary insult?

I am writing with reference to your recently published correspondence with J Morrissey of Gloucester concerning the problems encountered with a monitor repair at System Solutions.

I can only comment on the facts

as they appear in Atari World but quite clearly J Morrissey was quite entitled to ask that the part manufacturers be contacted to see if they would be willing to help with the cost of the repair. It is not unusual for firms to make a good-will gesture of some kind when one of their products fails unreasonably early even though it may be out of the guarantee period. If I was one of their shareholders I'd be much more upset that their products were failing prematurely rather than worried about the cost of helping a dissatisfied customer.

However, of much greater concern to me, and I suspect, many more of your readers, was your comment at the end of your reply. You may think your editorial style gimmicky, or even funny, but sadly in this case it is just plain rude. Your subjective comment in which you describe J Morrissey as "obviously one of the something-for-nothing brigade" was completely uncalled for, and your suggestion that the Atari scene could "do without people like you" was an unnecessary insult.

May I suggest that since you are not, by your own admission, a trading standards expert, that you moderate your comments. It would have been quite sufficient for you to give Karl Brandt the right to reply (as indeed you did) and then leave your readers to judge the issue for themselves.

In case you are wondering – no, I do not know J Morrissey, and yes, I do know Karl Brandt and System Solutions and I have been pleased with the help and advice I have received from them over the years. Since I do not know whether you will choose to publish this letter, I would be grateful if you could send a copy of it to him/her.

Paul Williamson, Spalding

Let it not be said I didn't publish a critical letter. Actually your letter was one of several telling me off for using unnecessary insults. So there I go – slapped wrist. Not one of my better wind-ups...

Bigger picture

Looking at the Big Picture competition in AWS has put me right in my place as a novice. The three pictures were excellent. However, if competitors are allowed to use other computers besides an Atari do you not think that in the long run you will be getting only a limited number of entrants, people with "only" an

Atari will think they have no chance to get the same results as in AWS?

Please, Atari comps for Ataris only. If not, where will you draw the line? Like many others, I look forward to the mag each month, it is the best. I would like to see more Q and A's though.

P Wood, Grays, Essex

I did hum and ha over just this point but in the end, as 90% of the entries involved some other machine, I decided not to let it interfere. After all, neither of the first two winning entries actually relied on PC or Mac technology – they simply used the better processing power to shorten the rendering/raytracing time. These days Ataris are being used more and more with other machines – check out the next letter – and to stick our noses in the air is just plain daft.

ST to PC

In common with very many ST owners out there, compatibility issues, together with the ready availability have resulted in my purchasing one of those PC thingies. No, I quickly hasten to add, I haven't abandoned the ST, and the point of my writing is that I now have two powerful computers within a couple of feet of each other. I didn't give this much thought until the other day when my 6 year old asked if the machines could "talk" to each other.

Now this opens up all sorts of possibilities, not least of which could be an issue of Atari World dedicated to the distillation of all human knowledge appertaining to the connection of an ST to a PC, and sharing the resources thereof. Sort of "if you can't beat them join them" – together – that is.

May I suggest a simple start. Firstly, how many wires do we need, and which orifices should we poke them into. Then perhaps a simple BASIC program to illustrate the principles involved. Why BASIC? Well because everyone has some form of BASIC somewhere. Then the first message – "Hello Dad"... "Hello Son". (Feels good already!)

Progress onto simple games, "OXO" (tic-tac-toe). Then perhaps the old classic "Battleships", other simple board games perhaps, but not chess because of the complexity, and there are too many good computer

chess programs out there anyway.

Now let's examine the public domain. Things like Ghostlink spring to mind, but there must be other utilities. There is of course the serious business of using the ST as a terminal for the preparation of material for example DTP which would ultimately be put together on (say) the school computer. I have managed to transfer a monochrome image from my Golden Image hand scanner onto my 486 via disk, but there's not much editing you can do on a 2-bit image!

Then obviously what about multi-player games? Flight or racing car sims immediately spring to mind. My logic, which of course could be wrong, suggests that if multi-player (ie multi-machine) games are compiled onto different platforms from essentially the same source code, then the data which needs to be transmitted between the machines (eg position and speed) is likely to remain the same, n'est-ce pas? And if a game runs in 256 colours on the PC, but only 16 on the ST, its playability should not be diminished. And I'm not about to buy another PC just for the sake of 240 colours! Am I right in my supposition? If so how many games fit the bill, and how many suppliers would be prepared to bundle two platform versions for the price of one? Keep up the good work on the mag.

PS About that free cover mounted ST to PC lead...

Andrew Stefanowski

I'm all for such an article – I have a PC, a Mac and an Atari on the same desktop and they swap data such as text files and images all day long. Unfortunately it's via floppynet rather than any hi-tech solution. I could never get Ghostlink to work properly.

I like the idea of ST to PC games, of course, because multi-player, multi-machine games are all the rage at present. Once you've played co-operative or deathmatch Doom on a pair of Jags or a PC network you'll know why.

Actually I seem to recall that the original Falcon flight sim had a head-to-head option with menu selections for the PC and Amiga. I don't know much more – anyone confirm this?

In theory it should be quite easy to write a head to head game for an ST and PC that uses a simple null modem cable. They don't even have to appear the same on each

machine – each machine simply reads the data coming into the serial port and interprets it as positions, scores and so on.

The only problem is development time. I doubt any of today's big game developers would put much effort into an Atari game. Giving it away wouldn't be a problem – writing it would.

Crossed wires?

Browsing through the feature article on modems in AW9, "Communications for Dummies", I fear "the Atari team" swallowed some dummy technical info. Already in paragraph two, it is blithely stated that today's modems reach "speeds of 28,800 baud". They most emphatically do not! The error is compounded by the "Comms Jargon Buster" which incorrectly defines "Baud is short for bits per second".

At the heart of the matter is the much misunderstood relationship between bps (bits per second) and baud (often called "bits audio", but correctly named after Baud). These two measures are necessarily equal only when the datastream is unmodulated, and it is extremely unfortunate that comms programs and equipment designers often label the bps setting as "baud", even though it here may be technically correct at the serial port. Using the term "baud" as synonymous with bps when speaking of modem "speed" is however totally incorrect!

Only in the simple modems of bygone ages (300 and 1200 bps), did the actual bps rate even remotely correspond to the modulated bit rate (baud) sent over the phone line. Already at 2400 bps, the modem is in fact operating at 600 baud. Even the 9600 modem used 600 baud, 8-fold modulating the bps before passing it down the phone line. The reason is simple: your average phone line will simply not pass much above 2kHz, its response peaking somewhere in the region 1 to 1.5 kHz (on good days).

When speaking of a modem's "speed", ie 9,600, 14,400, 28,800 or whatever, we speak only of the maximum bps passed across the established connection, not counting any compression applied to the data stream before modulation. In fact, the computer may be sending or receiving at 38,400 bps, the modem at 28,800 bps (max) V.42bis, and the phone line experiences 1200 baud maximum.

These days the slimmed modem handbooks often fail to even mention the word baud and do not specify the actual phone line speeds, since this technical aspect is apparently deemed too difficult for the average PC owner.

In any case, I realise most people don't know or even care about this difference between bps and baud but it is unfortunate that the mixup is passed on in factual

articles and definitions. I hope "the Atari team" will appreciate why I bring this up.

Bo Leuf, Daggskimmer, Scandinavia

Err, quite. I liked our explanation better though – it was a heck of a lot simpler to write...

Atari marketing

First, let me say I was quite pleased with my first encounter with *Atari World* and wish you success in long term publication. It's definitely expensive here in the Colonies, but it is delightful to read a full-colour magazine with so many new products, reviews etc for this "dead" platform. I also subscribe to ST-Informer and Current Notes, but there is an obvious contrast in Atari activity between the hemispheres. Which brings me to my main reason for writing.

From my perusal of publications and various electronic media, it seems evident that there are many more products available for Atari than most users are aware of. At the same time, I constantly see (electronically) potential customers clamouring for products which in many cases exist but are unknown. With just about every developer complaining about the "shrinking" market, it would seem logical that every effort would be made to make products available and to communicate that availability. Unfortunately, my experience and observation has been quite the opposite.

Starting with *Atari World* as an example, it is (I hope) being read in the US by more than just me. Toad Computers is doing a great job of promoting AW and other publications both at their store and on the World Wide Web. As I browse through AW, I see all sorts of products and start salivating and grab for my credit card but then, alas, I see no way of obtaining them. I flip to the advertisers index and on not one entry do I see an email address, yet I know three of them which definitely have email.

One of the first rules of marketing is to keep the barriers between vendor and customer to a minimum. In short, it seems many Atari vendors and developers are failing to see that this is a world market, and Internet/email is the media of choice (and of necessity) for direct communications. Your hard copy stimulates the appetite – I am referring to the follow up, the object of all this sale of products which keeps customers productive, and the vendors and developers and magazine publishers in business.

The fact that you have your email address listed indicates that I am at least somewhat preaching to the choir, but it's obvious that your advertisers haven't caught on yet. They would all do well to study Toad Computers or Computer

Direct's marketing, their use of the Web, online services, newsgroups, etc, as well as the more traditional means is highly effective.

Most importantly, they respond to enquiries. The only thing worse than not being able to contact an agency is to be able to and be ignored. If a product is not available than say so – say something.

Finally, developers need to at least keep their distributors and vendors informed. Just one example, unfortunately quite typical. I had managed to contact HiSoft via email and they said that *Twist* was about to be released. A few weeks later *Twist 3* was written up in AW and I (silly me) thought that I should be able to obtain it before long. According to Toad though, Oregon Research, the US distributor, had heard nothing. I still have no idea when I will be able to obtain *Twist 3*.

If a developer intends to sell its product in the US (or anywhere else) then how much does it cost them to let their distributors know what's coming and when? Why are they not getting the word out to the newsgroups, Genie (a major cluster of potential Atari customers), etc. Netiquette does not generally consider product announcements as advertising, particularly in a product-starved environment such as Atari's.

And this tirade has gotten quite out of hand. All I meant to say was that you have a good magazine, request email addresses for advertisers, and ask that some thought be given to improving marketing. I hope some of my suggestions are worth consideration.

Fred Pierce, NASA, TX

Well, your "tirade" says it all really. I fear you may be over-estimating the importance of email and the Internet but must admit I'd like to see all advertisers use email addresses – if only because it would make my job a lot easier!



PRICE BLOW-OUT ON TOP QUALITY CD ROM DRIVES



**FROM
£149**
inc

Also works
as a
portable
CD audio
player!

Media Vision
CD ROM drive with
SCSI cable £149

**CD ROM
complete with
Toplink £199**
(for ST owners without
SCSI hard disk)

Affordable

The time was when CD ROM drives were out of reach of the pocket of most ST owners - no more! We have large stocks of high quality Media Vision SCSI CD ROM drives & are able to offer them at just £149 inc VAT,

More than just a CD ROM drive the unit can also be used as a portable CD player - it really is that compact.

To order call 0181 345 6000

We have moved Please note our new address

GASTEINER

Address 18-22 Stirling Way, North Circular Rd, Edmonton, N18 2ZY

E&OE



Floppyshop

DEPT. AW10, PO BOX 273,
ABERDEEN, AB9 8SJ

Partners: Steve Delaney & Irene Lamb



Quality and Service

At Floppyshop we only stock the very best software. All our ST disks are double sided and are crammed full! In addition, our catalogue disks are the most detailed in the UK and cost just £1.00. Please state ST or Falcon. Same day despatch on orders. Credit card orders are welcome (minimum value £2.00). Unless otherwise stated, all disks cost £2.00 each and run on a standard machine with 512k of memory (1 Meg if it's a Falcon) upwards. COLOUR OR MONO Disk numbers ending 'C' i.e. GAM.10C are for COLOUR MONITORS OR TV'S ONLY. Disk numbers ending 'M' eg. ART.63M are for MONO MONITORS ONLY. RGB or VGA Indicates the monitor type required for a specific Falcon program.

Artistic Flair!

Computer graphics is no longer a niche market. It commands more interest nowadays than any other single field in computing. The ST sports a superb collection of drawing and painting packages, with a few excellent CAD packages thrown in too! Here's just a taste of what's available (we have around 100 graphics disks in our catalogue!). All at £2.00 each unless otherwise stated.

Colour Packages

ART.12C Palette Master - Superb paint package which allows you to display 50 or more colours on screen.
ART.15C Flicker - The predecessor to Cyber Paint. Full range of drawing and animation tools. Van Gogh - Another animation package.
ART.35C Tri-Art - Easy to use package ideally suited for kids of all ages.
ART.50C EZ-Art - The feature packed predecessor to Floppyshop's commercial release. ColourBurst II - Supports creation of screens with up to 3200 colours!
ART.67C Colourspace - Jeff Minter's highly acclaimed light synthesiser. Deco ST - Degas compatible but far superior with all the standard tools and a few extras.
ART.3091C Picture Concept - Adds numerous special effects to your pictures. Video Concept - Alternative digitising software for use with Vidi ST.
ART.3139 Synthetic Arts v2 - An impressive full featured art package with a host of features. Has a similar 'feel' to Neochrome.
ART.3490C Project Dragon - A tutorial on how to create an animation using Cyber Paint. Includes text, images and a completed Cyber Paint animation.
ART.3718C ColdDump - Replaces the ALT HELP screendump routine with one which prints out in COLOUR to 9-pin and 24-pin colour printers.
ART.4773C Movie Master - A former commercial package which lets you cut sprites from your own pictures and use them on various backdrops. It even lets you add sound to your 'movies'. Several example 'films' included on disk.
ART.4774C Stereo Image Creator (STIS) v2 - Create your own 3D images which can be viewed without those silly coloured glasses! Includes several examples and supports printing to Epson compatibles.
UTL.187 Ani-ST - Formerly commercial and probably best known as Aegis Animator. This was once the animation package by which all others were judged!
The Following Packages Run in Colour or Mono
ART.39 Degascon - Loads up colour pictures and converts them to mono or prints them on any Epson compatible printer.
ART.40 Art_ST v2.32 - A full featured package which is rather Degas-like in appearance. Lots of tools to experiment with.
ART.55 KDoodler - Runs in all three resolutions, features multiple workscreens and lots of drawing tools. Full manual on disk.
ART.61 Electric Image - Easy to use package for all the family. Supports two drawing screens, all three resolutions and includes an extensive manual on disk.
ART.3485 GEMVIEW 3 - Lets you view or convert over 40 different file formats (including GIF, TIFF, JPEG and Photo CD) on your ST!
S-ART.3488 & S-ART.3489 AIM 3.1 - The first image processing package on the ST. Crammed with features for enhancing digitised images. Includes Epson GT-4000 scanner support. Needs 1 Mb. £3.50.
ART.3719 Paintport - Originally commercial, full featured art package. All the usual tools and some extras too. Includes on-line help and runs in all three resolutions.
ART.3833 MixFill 3 - An excellent fill pattern editor. Includes 1000 ready made fills on disk. Save your fills in picture, data or GFA Basic format.
S-ART.3872 & S-ART.3873 KANDISKIN - Simply the best object oriented package available. Full complement of drawing tools. Supports both mono and 16 colour vector graphics in GEM format. Also included is a demo of Kandinsky 2 which supports 256 colour vector objects, CVG files and much more. £3.50.
ART.4282 Greyscale Image Processor - Packed with features. Converts images to 256 greyscales for filtering and special effects. Includes on-line Help and printing to HP and PostScript printers.
ART.4635 Eclipse - Includes extensive file support, 24 image processing filters, RGB colour adjustment, gamma correction and lots of weird effects. Needs 1 Mb.
ART.4673 Speed Of Light 3.8 - One of the fastest GIF and JPEG viewers (other formats supported too). Displays images in full colour, even on an ordinary ST! Some image processing features included. Now runs in mono too.

Mono Packages

ART.11M HiStart and Public Painter - Two popular classics with quite a few extras. Some would argue that Public Painter has never been surpassed!
ART.13M ArtuST - Similar in many respects to Degas Elite but superior in others. Great special effects. Picworks - Incredible range of special effects to add to images created in other packages.
ART.24M Little Painter - A classic amongst classics! Comes complete with its own font editor, sample fonts, example pictures and custom designed fills.
ART.63M Butterfly Artist - Reads and writes a wide range of file formats. Supports the creation of 300 dpi A4 pages and prints to 9-pin & 24-pin printers. Approaches DTP standard! Additional fonts on FNT.4601 & FNT.4602. Needs 1 Mb.
ART.66M TrickFilm - Create your own cartoon animations of up to 100 frames! HPM Draw - Object oriented drawing package which supports 9-pin & 24-pin printers. Needs 1 Mb.
ART.73M PAD 2.4 - Often considered to be the king of mono art packages. Extensive file support, lots of tools and 3D object creation. Includes animation and printer support too! Needs 1 Mb.

ART.4330M Happy Paint - Another popular paint package. Includes all the usual tools and a few superb extras. Supports 9-pin and 24-pin printers. Needs 1 Mb.

ART.4331M Paintshop Plus v2 - One of the best mono packages around. Lots of extra tools and special effects. Supports GDOS, SpeedoGDOS and BGI fonts. Prints to 9-pin, 24-pin, HP Desk/Laserjet and SLM804/605 printers. Needs 1 Mb.

ART.5057M Imagelab 2.1 - Greyscale image processor with a few nice touches, including the ability to convert mono IMGs into greyscales. Over 20 image processing filters are supplied. Needs 1 Mb.

ART.5111M EC Paint - A worthy challenger to PAD. Extensive file support, larger than screen images, Calamus and GDOS file support, masses of drawing tools, gradient fills and 3D object support. Prints to 9-pin, 24-pin or HP Desk/Laserjet.

Computer Aided Design

ART.26M JIL 2D - An extensive fully functional CAD package. Includes the use of Macros etc. Needs 1 Mb.

ART.3486C T-CAD-Y - Basically a drawing program with all the usual tools but also with differing measurements and costings for different types of material. Supports overlaying and loads/saves screens as 'sheets'.

ART.3734 Polyfilm - A CAD 3D type program that generates animations like small films. It is both well written and well documented. Comes complete with examples and its own film file viewer.

ART.4427 ESCAD - A professional CAD/CAM package. A converter program is included so that you can convert DXF files used by AutoCAD/AutoSketch (on the PC) into ESCAD format and vice versa. German docs!

ART.4642 Multi-CAD - Suitable for a variety of uses including architecture, chemistry, engineering and PCB design. Libraries of architectural, electrical and mechanical shapes are included. Supports multi-layer drawings and massive drawings by use of virtual screens. The best CAD package around!

Mind Your Language!

The ST is an ideal tool for learning to program with almost every major programming language being supported. Here's a quick rundown on our most popular compilers and assemblers. In total we have over 150 disks full of programming languages, source code and such like. Why not order our two disk catalogue for just £1.00 and check out the rest yourself?

LAN.04 XLisp 2.1 - The complete implementation of the most commonly used language for utilising 'Artificial Intelligence'.

LAN.12 ST Icon Language - Based on Snobol 4. This has nothing to do with icons, the name is purely coincidental. Icon is heavily documented on disk and is a complete version of the language.

LAN.14 Forthmacs - A fully functional version of Forth '83 based around the Micro Emacs text editor.

LAN.18 Ana Systems Module 2 - Fully functioning implementation of the language contained within an easy to use GEM based shell.

S-LAN.28 & S-LAN.29 GNU C v2.42 - One of the most popular C compilers. Needs at least 2 Mb. hard drive recommended. £3.50.

LAN.30 GNU C Debugger - For use with S-LAN.28 and S-LAN.29. Source level debugger with many different types of breakpoints and data examination facilities.

LAN.46 Modpas - A Public Domain Pascal Compiler. Included on disk are various library modules. Documentation is partly in English and partly in German.

LAN.77 Turbo Assembler - An updated version of the commercial Omikron Assembler. Integrated debugger and editor, GEM libraries, English docs and sample programs included. Needs 1 Mb.

S-LAN.3098 & S-LAN.3099 GNU C++ - The one and only C++ compiler for the ST. Realistically needs 4 Mb and a hard drive. £3.50.

LAN.3251 BC FORTRAN 77 compiler - The language used by 'real programmers' according to legend! Fully working, but not much documentation.

LAN.3253 Fortran to C Converter - As the name suggests, it converts Fortran source code into GNU C code. Needs 2 Mb and a hard drive.

S-LAN.3435, S-LAN.3436 & S-LAN.3437 SB-Prolog v3.1 - A full Prolog language and compiler ported from Unix. It performs at about 5100 LIPS (logical inferences per second) on the ST and needs at least 1 Mb, preferably more. £5.25.

LAN.3542 Portable Prolog v2.1 - This interpreter understands just about all of Clocksin & Melish. Complete with examples and built-in Microemacs editor.

S-LAN.5106 & S-LAN.5107 Sozobon-X - An Extended version of the Alycon C compiler. Sozobon C v2.00 from Germany. ANSI/POSIX compatible C compiler with extensive documentation in both English and German. Includes a GEM based front end and on-line Help. Needs 1 Mb and a hard drive. £3.50.

FWG.03 ASSEMBLER 2000 by Chris Skellern - A complete 68000 assembler package. The disk contains the usual integrated screen editor and assembler along with an extensive tutorial. Powerful debugging options are built into the package and it includes several features not found on other assemblers. £3.00.

Get Typing!

Do you want to improve your typing speed and increase your productivity? It couldn't be easier using one of our many typing tutor packages. Why not give it a try, you've got nothing to lose!

UTL.37 Typing Tutor and Word Invaders - A typing tutor combined with a word game designed to increase your typing speed. NOT STE.

UTL.341 Typing Tutor by Philip Taylor - Based on the Pitman Horizontal Method. Numerous tutorial exercises are included on disk. Also on disk are graphic files showing the correct hand positions.

UTL.367 STOS Typing Tutor by Richard Gale - Probably the best typing tutor in Public Domain. Contains over eighty keyboard lessons. NOT TOS 2.06.

UTL.3321 TYPIST - A well researched typing tutor program with numerous lessons. Teaches the Pitman and Dvorak methods.

Word Processing

Now that you have learnt how to type, you will need a good word processor. Here's a few recommendations from our catalogue, all at just £2.00 each.

WRD.07 ST Writer Elite v4.8 - A popular choice over the years. Now with GEM (offering full mouse control) or non-GEM mode. Not WYSIWYG but more fully featured than many others which are.

WRD.17 First Word - The predecessor to 1st Word Plus. Fully WYSIWYG and very easy to use. A good introductory package.

WRD.27 Magni Writer - A version of ST Writer which uses large size characters and is particularly useful for anyone with eyesight problems.

WRD.3124M DB Writer 1.4 - A word processor with all the standard features plus a spell checker, word count, page preview, two column printing and mail merge. Fully mouse driven. Perhaps the best word processor for mono users.

Needs 1 Mb.

WRD.3891 EVEREST v3.5E - A nice easy to use text editor which is fully GEM based. It allows up to 10 windows to be open at once and has most of the features of a dedicated word processor. GDOS fonts are supported if GEM or SpeedoGDOS is installed. Everest supports keyboard macros, Multi-TOS and the GEM Clipboard.

WRD.4501 Marcel 2.34 - One of our most popular word processors. In-hand text in ASCII, 1st Word, Wordplus, Word Perfect 4.1, RFT forms and some ASCII, RFT and Wordplus. Marcel includes a built-in spell checker (with 45,000 words!), supports numerous layout styles, different fonts and is feature packed! Needs 1 Mb.

Other Products Available

DegasArt Parts 1, 2 & 3

The highly acclaimed three disk graphics tutorial package has been upgraded to v3. Well written, easy to follow tutorials combine with 120 quality illustrations giving you a step by step guide to creating your own masterpieces on your ST. As well as delving into every significant feature of Degas Elite, DegasArt takes you through the basics of reproducing artwork on a computer and guides you through the 'tricks of the trade'. As most of the tutorial discuss general graphics techniques, these can be equally well put into practice with EZ Art Professional, True Paint, Pixart, Canvas, Deluxe Paint, Fair Paint, Cyber Paint or indeed any other ST graphics package, including the vast range of titles available in the Public Domain. If you want to learn to draw and paint on your ST (or improve your existing skills), DegasArt 3 simply cannot be beaten. DegasArt 1, 2 & 3 come together as a three disk set for the incredibly low price of just £12.00 + P&P (UK free, Europe £1.50, rest of world £3.00). Existing users of DegasArt parts 1 & 2 can order part 3 on its own for just £5.00 + P&P (UK free, Europe £1.00, rest of world £2.00).

Easy Stitch

Easy Stitch is a cross stitch pattern generator. It lets you to convert graphic files into cross stitch patterns or create your own on a grid on screen. The computer based variation stands head and shoulders above the traditional graph paper method as it allows blocks of stitches to be copied, rotated, enlarged or reduced to suit. In fact you can even edit the individual stitches. Patterns up to 10 feet by 8 feet can be created easily on your ST and printout is supported to most common dot matrix and laser printer types. Easy Stitch is the leader in its field, being the only cross stitch package to support the creation of the most complicated back stitch and half stitch. Available at the low price of just £3.00 + P&P (UK free, Europe £1.50, rest of world £3.00).

Easy Text Pro Vector

At last, quality Desktop Publishing is within everyone's grasp with the highly polished, yet budget priced Easy Text Pro Vector. Create your own leaflets, brochures, newsletters and business stationery easily with this well documented easy to use package. This version makes full use of the increased flexibility offered by SpeedoGDOS and NVDI 3, giving crisp, clear output on all types of printer. Now available at the 'silly' price of just £19.95 + P&P (UK free, Europe £2.00, rest of world £5.00). Can you really afford to be without this product? Easy Text Pro Vector needs 2 Mb of memory and a hard drive or 25 Mb if you don't have a hard drive. SpeedoGDOS 4 (or later) or NVDI 3 are also required.

Easy Text Pro

This is Easy Text Pro Vector's 'little brother' with most of the functionality of Pro Vector but tailor made for users who do not have SpeedoGDOS or NVDI 3, and are short of memory. It runs on a basic 1 Mb ST and does not require a hard drive (although we do recommend that you have one). Easy Text Pro is also available for just £19.95 + P&P (UK free, Europe £2.00, rest of world £5.00).

OMEN Multi-Tasking Operating System

Designed as a cross platform operating system, programs written for OMEN on the Atari will run without modification on a PC, Mac or Amiga running OMEN. OMEN completely replaces TOS and GEM, providing fast, compact (in terms of memory usage) true pre-emptive multi-tasking OS. This full version offers lots of extras over the Shareware version and is only available from Floppyshop in the UK. The OMEN operating system costs £23.50 + P&P (UK free, Europe £2.00, rest of world £4.00). Please note that OMEN does not run TOS or GEM programs directly, although their source code is easily adapted to have the OMEN Developers Kit.

OMEN Operating System and Developers Kit

The full developers' kit including the massive programmers' reference guide on disk. The five disk package includes a 68000 assembler, disassembler, debugger, Forth assembler and a C compiler. The OMEN Developers Kit has deliberately been priced low, so as to bring aspiring new programmers into the fold and now includes the full registered version of the OMEN Operating System (as above). The combined OMEN Operating System & Developers Kit costs £52.00 + P&P (UK free, Europe £3.00, rest of world £5.00).

FALCON 030

Floppyshop have over 600 HD disks of Falcon software at just £2.00 each or less. Lack of space prevents us listing Falcon software this month, so why not send us £1 for the Falcon catalogue? You won't be disappointed.

PAYMENT DETAILS:- All prices include postage in the UK. Overseas orders welcome. Please add £1 per order for Europe and 10% of order value (£2 minimum) Rest of World. Overseas customers please note - We can only accept payment by credit card or in UK currency (cheque drawn on a British bank is recommended). Cheques should be made out to FLOPPYSHOP

Floppyshop

- Where Quality and Service Count

Credit Card Line Tel/Fax 01224 312756, General Office Tel/Fax 01224 586208



Reader Disk



Joe Connor brings you details of what's on this month's reader disk.

The optional reader disk supports the software covered in the magazine and creates a link between the reader and the software authors. *Atari World* supports and encourages authors - in return you can do your bit by supporting them. The *Atari World* team is in constant contact with the best Atari programmers around - we keep your finger on the pulse and obtain the very latest versions, often exclusive to *Atari World*!

A single reader disk costs £2.50 inclusive of post and packing - around the same price as a typical PD disk. Some issues offer two or more reader disks with each additional disk costing £1. For example, an issue with two disks would cost £3.50 inclusive of post and packing. So the choice is yours but don't forget subscribers get all additional disks absolutely free! Check out the special subscriber deals on pages 56 and 57.

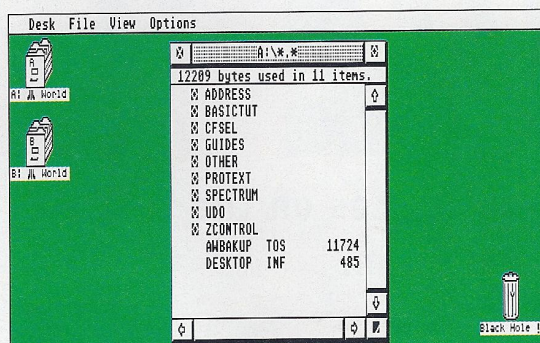
As usual everything on this month's reader disk has been covered inside the magazine. To make it easy to back up your reader disks a copy of AWBAKUP.TOS, specially programmed by Ofir Gal, is included each month. Simply run AWBAKUP.TOS and follow the on-screen instructions; the program even formats the disk for you. We recommend you always store your original disks in a safe place and don't use AWBAKUP.TOS for any other purpose.

What's on the disk?

Address v2.04e

Shareware • Carsten Setje-Eilers

Address is a stylish name and address manager which runs as either a program or desktop accessory and offers comprehensive import/export options via the Clipboard, Report window or XAcce protocol. Also includes Auto folder birthday alarm.



HiSoft BASIC listings

Ofir Gal

HiSoft BASIC listings to accompany Ofir's tutorials in ST Source.

Call FSEL v1.1

Freeware • Mark Baines

Call File Selector is a CPX module capable of calling the file selector from within any program which can access the GEM menu bar and Control panel. CFSEL is compatible with all popular OS and file selectors including Selectric and Freedom.

Protex macros

Mark Baines

As a follow up to his Protex article in Issue 9 and as a response to queries from readers, Mark has conjured up some more macros and Promerge files for Protex users.

Spectrum emulator utilities

Add printing capability to the Spectrum emulator, refer to the Q&A pages for more details.

UDO Release 4.0e

Shareware • Dirk Hagedorn

Universal DDocumentation (UDO) can help authors maintain their documentation in a variety of popular formats with the minimum of fuss. A UDO format source file can be converted effortlessly into ASCII, ST-Guide, LaTeX, Manual page, HTML, Pure C help, WinHelp and RTF formats.

ZControl

Shareware • Ralf Zimmermann

ZControl is a replacement for Atari's own XControl. Several CPX modules can run simultaneously in their own windows. The running order of CPX modules can be changed, which is important for MagiC Mac users. Ideal for use with MagiC. There are a few minor problems under single TOS but the author is working hard to fix them.

Reader Disk problems

In the unlikely event that a reader disk won't load or gives you any other problems, disconnect all peripherals, switch off your computer for at least 20 seconds and try again. If this doesn't solve the problem, return the disk to the *Atari World* disk sales address clearly labelled *Atari World* faulty disk and enclose a self addressed envelope. Your disk will be tested and replaced or returned as quickly as possible.

Should you require technical help, call the *Atari World* disk helpline on Wednesday evening between 7pm and 9.30pm on 01206 852602 or leave a message on the answer phone outside

Atari World Profile

Exclusive • Joe CoAtari World's own database for issue nine in ST-Guide format. Added to the files included in previous issues the database now covers the first nine issues. You may prefer to create a separate database disk which can easily be extended each month, to do this: Use AWBAKUP.TOS to make a copy of the reader disk. On the copy delete everything apart from the GUIDES folder. Each month copy the contents of the latest reader disk GUIDES folder to the GUIDES folder on your database disk - some files will be overwritten each month, this is normal. Optionally add a copy of ST-GUIDE.ACC and ST-GUIDE.INF to create a stand alone database boot disk.

SEE PAGES 68-69 FOR ORDERING INFORMATION AND BACK ISSUES

The Atari World Show

Andrew Wright muses on the first ever *Atari World* shows in London and Brum.

The first *Atari World* shows in Birmingham and London on the weekend of the 9th/10th December last year were well attended and hailed as a great success by the organisers, vendors and visitors alike. Several hundred turned up at each location with the slightly larger Birmingham venue attracting the most – but only by a whisker. All the big UK Atari names were there – not to forget Best Electronics from the US and its unbelievable collection of all things Atari. Most of the *Atari World* writing team were there too and I was put through my paces with an exhausting but highly enjoyable set of three seminars on each day.

Those of you who attended the Birmingham show may well have wondered about the identity of the hecklers at the back, especially in the third seminar of the day. Wonder no longer – that was the bulk of the *Atari World* team putting the editor through the hoop. Just because my management style bears a strong similarity to that of Genghis Khan doesn't mean they should act like

Mongol hordes, now, does it? I just wish I could cut their pay even further but the half pence coin is no longer legal tender...

Anyway, now that the dust from the shows has settled it's time to sit down and look at what we all learned. Hopefully you all got answers to some of the questions you wanted to ask, whether by asking one of the many experts around, or by listening to the flow of information in the seminars. I hasten to point out of course, that while the bulk of the flow was from me to you in the form of hot air, the really useful stuff, in the form of cold, hard facts, was coming in the opposite direction.

Many of you may even have made friends or met up with online acquaintances you'd never met before. I certainly did – I'd never met many of the *Atari World* contributors face to face until the Birmingham show! At one of the seminars we talked briefly about user groups and I offered the magazine's support to anyone wanting to get a group together. I'm glad to see that at least one such group is getting underway as a direct result of the show (South Wales, see news

pages) and I must reiterate the offer to those of you were unfortunate enough not to be there – if you want to start a user group or an Atari-based club, you can have free editorial coverage to get you going. And to everyone I met there, especially those who took time to introduce themselves, a big thank you. It was nice meeting you all.

Learning curve

But what else did I learn? From my point of view, this was the first show I'd been to since the Newcastle event and it helped me a lot. As one of the new breed of teleworkers – linked by modem and fax to the office and the other contributors – I find it all too easy to stay at home. It's particularly easy because I live in a tiny Lincolnshire village and it takes me hours to get anywhere remotely like civilisation at all. If it's snowing or raining, excuses are even easier to find. I'll make no secret of the fact that the publisher twisted my arm to get me to venture out but I found myself thoroughly enjoying the day. What

ATARI World

more I learned some interesting things.

Biggest surprise of the day was the number of users with hard drives, modems and full memory slots. Two years ago when we were producing ST Review, we assumed that the average owner runs a 1040 ST, possibly upgraded, with a single floppy drive and perhaps a dot matrix printer. Although we suspected things were changing, it was quite a shock to see just how far most users have come.

Judging by the show of hands at each event, my own estimate is that 80% of those present had hard drives and probably 90% had 2Mbs or more of RAM. Now I'm quite prepared to accept that those attending the show were probably the super-keen Atari element, so we can't judge the entire readership this way, but it will certainly make a difference to the way we structure and plan the magazine in future.

About the mag

We learned a few home truths about the magazine too. While most of you were full of praise for it – I still haven't come across an Atari owner who doesn't like it! – it has a few shortcomings, not least of which is its late arrival on the shelves. Unfortunately that's a problem that's unlikely to go away in the near future – we're a small start-up publishing house and we have to rely on a number of part-time contributors. However steps are under way to recruit full-time staff so we'll have to wait and see.

In response to your own views put forward at the seminars, we've made a few changes already. Firstly we've extended the letters pages and the Q and A section. Atari users are obviously a nosy lot and love to hear what everyone else is doing. We're going to try and boost our news coverage too – if anyone hears any snippets they think we should cover, please get in touch, either by email, letter or telephone.

Many of you want to see PD and shareware programs covered in greater depth. As the Atari market shrinks, it's the shareware stuff that will keep us going and this month we've included a review of

Star of the Show

Star of the show for me was the Neon CD ROM. OK there was a lot of superbly priced hardware and System Solutions were selling their EZ135 drives as quickly as you could say "SCSI host adapter" but the thing that really caught my eye was this compilation CD ROM. Why? Because it shows the Atari in its true glory – as a budget graphics workstation that can still hold its head up in the company of PCs and Macs.

The Neon "3D Imagination" CD contains megabyte after megabyte of clever animations produced using Neon, the excellent Atari renderer

that were still hoping to see on these shores soon. Also included are demo versions for the TT, Falcon and PCs running OS/2 and there are demo versions of Apex and Pixart too. It can be enjoyed on almost any computer system capable of playing back FLI, FLC or AVI animations and displaying colour images. Dozens of textures and images are included too.

It costs only a tenner from Compo on 01487 773582 and is well worth it for sheer entertainment value.



The Neon "3D Imagination" CD is an excellent advert for Neon.

Protracker and a discussion on the merits of ST-Guide. We're also going to abolish half page reviews and extend others where we can. In the same vein we'll try to be as balanced as we can where games are concerned but readers must remember that for every "serious" program I've received for review in the last month or two, there have been three games.

For those of you not at the show, I'd say that visitors were split down the

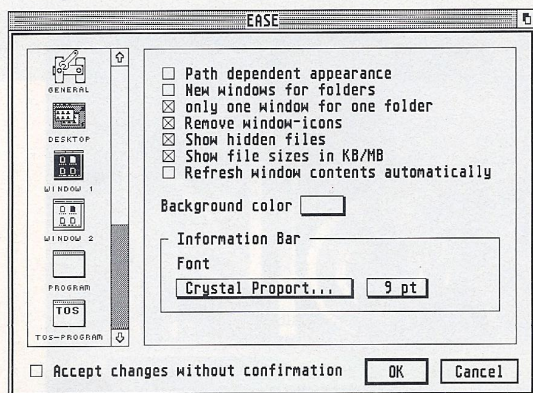
middle on the subject of the Jaguar. It isn't a computer but it is an Atari machine. The arguments could rage all day but we'll give it coverage as long as Atari supports us by sending us review material. After all, many Jag owners are ST owners demonstrating their unique brand loyalty.

If nothing else, I think we're all agreed that the shows were a success – thank you all for attending and here's looking to the next ones...

ATARI World

Ease does it

Ofir Gal takes a close look at the latest version of Ease, the popular alternative desktop



In Ease you are free to configure windows appearance to suit your needs. By using GDOS fonts for example, you can squeeze a few more files into a window.

Ease, one of the most popular utilities for the Atari range has just been updated to version 4. Ease already has a reputation of a being very reliable product and version 4 was eagerly awaited for by many users.

Ease, like most alternative desktop programs, borrows heavily from both the Atari desktop and the Mac Finder and is therefore very easy to use straight from the box. When started, it presents you with a row of drive icons at the top of the screen, as well as printer, memo and trash icons. As with the Atari desktop, double-clicking on a drive icon open a window displaying the contents of the drive using icons or text. This is where Ease first reveals its capabilities - unlike other desktop programs. First, it automatically opens the window sized to fit its contents. Secondly, windows can be viewed as icons or text independently and their status saved.

Window items, such as programs and files can be dragged to the desktop and each program can be assigned default parameters and paths which comes in handy when using archivers like ST ZIP. You can for example set ZIP to automatically run and unpack an archive into a pre-specified folder whenever you double-click on a ZIP file. For programs that support this feature, you can launch multiple files, so if you wanted to view 5 IMGs, you just drag them together to the Imagecopy icon. Ease also supports the AV

protocol, allowing all sorts of tricks such as passing arguments to desk accessories and preventing programs from running twice under a multi-tasking operating system. Talking of which, Ease works in perfect harmony with MagiC 4, supporting many of its features and also allows the use of Kobold for ultra-fast file copying. Ease can display text files in a standard scrollable GEM window.

Programs

In Ease, you can install a number of default file types for a program. This means that double-clicking TIF, IMG and GIF automatically starts GEM-View, or PAP and RTF launch Papyrus. Furthermore, you can set the default directory to be that of the first file or the program. A program can be run directly from the window, placed as an icon on the desktop or from the Programs menu. Here you can place programs you use often for quick access. You can set the default parameter, and freely name the menu items you create. It's possible to have an entry that loads a letter template called "Letter" into your word processor, and another titled "Fax" which loads a fax template into the same program.

Easy access

In addition to these features, the new File Tree Popups make access to deeply nested files easier than ever. Simply click and hold down the mouse over a folder or drive icon and its contents appear as a popup menu. When the desktop becomes cluttered with windows you can just double-click on any desktop area to reveal a popup menu listing all the icons and drives on the desktop. If you're tired of double-clicking, you can single-click the right mouse button instead.

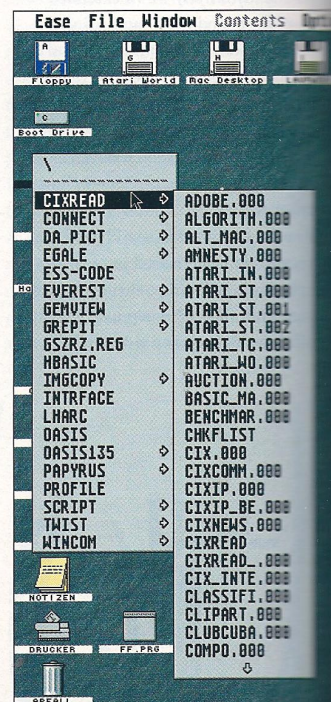
Verdict

Ease remains an outstanding program. This review only covers a fraction of its many features. It is true to its name, making your work as easy as possible. It is just as stable as it ever was - I have not managed to crash it even once. It is

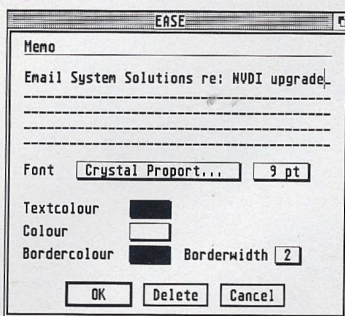
friendly and productive, allowing you to get the best out of your system. The new features are very useful, but I was expecting to see more of them.

Long file name support is sorely missing which is a shame as MagiC 4 does support these. The program does not make full use of some of the advanced NTFS features, resulting in it taking ages to startup if you have many fonts installed. Memory usage is quite high - 500Kb when running in ST High resolution and approaching 1Mb when running in 800*600 in 256 colours. There are no keyboard shortcuts in dialogue boxes or support of symbolic links (groups and aliases). The new manual is good, but leaves a few questions unanswered. What exactly are Image "AND" and "OR" modes?

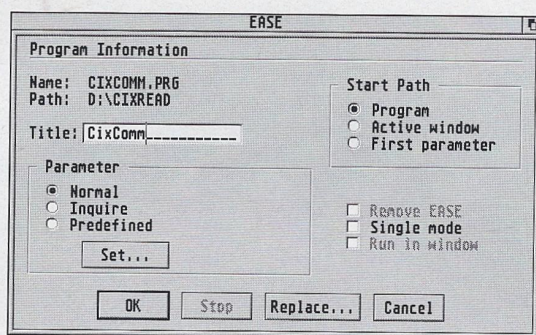
Nevertheless, Ease is still an excellent program and the low upgrade cost makes this a worthwhile upgrade.



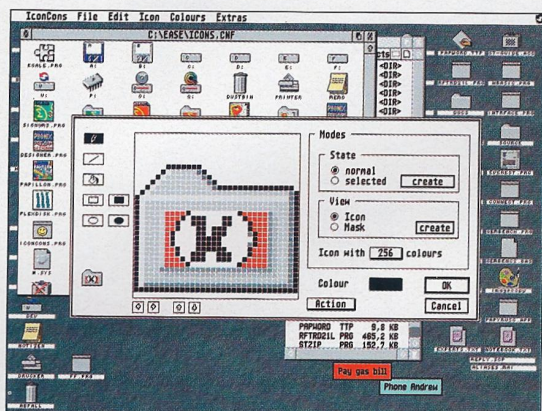
The file tree popup menu is very useful when searching for a deeply nested file on your hard disk.



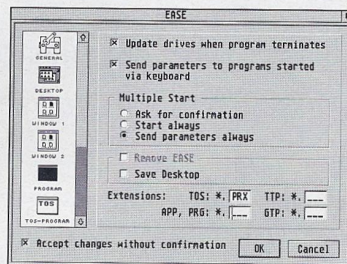
The new memo facility - another small step towards the paper-less office. The sticky memo notes it creates can be placed freely on the desktop.



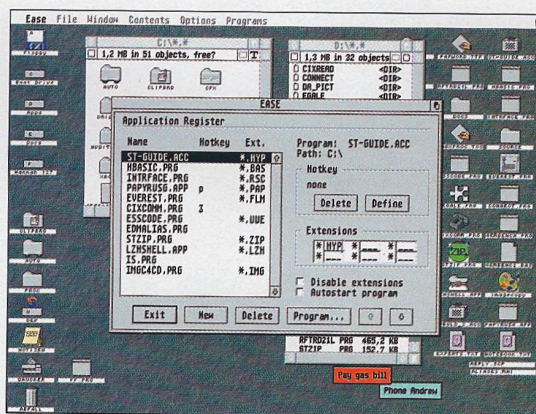
Each program can be set a default directory and parameters and under MagiC, it can be run in single-tasking mode if necessary.



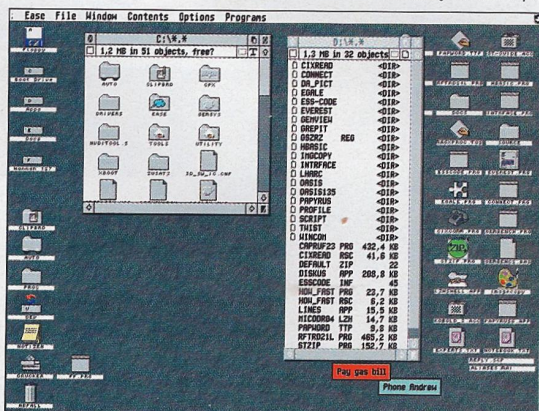
Ease comes with an icon editor, allowing you to import icons from resource files and edit them or even create your own.



The new Settings dialogue box simplifies access to the numerous user options. All options are now accessible from this single window.



Each program can be assigned default file types. Desk accessories such as ST-Guide are automatically opened when you double-click a HYP file, courtesy of the AV protocol.



The Ease desktop in glorious colour, running on a Falcon in 256 colours. Among other things, Ease allows independent appearance for each window - one showing files in text mode, the other displaying icons.

New features

Ease 4 offers a number of new features over version 3. Among them the new memo facility and file tree popup menu are most noticeable.

✦ **MagiC 4 compatibility:** Ease utilises the new shutdown feature of MagiC 4. If you quit Ease it gives you the option of quitting all running application and flushing the write-ahead cache that's built into MagiC.

✦ **Memos:** The new memo icon lets you place sticky notes on the desktop. These can be dragged around the screen, edited at any time by double-clicking on them or deleted by dragging them to the trash.

✦ **File tree popup menus:** Clicking and holding the mouse down on a drive icon displays the contents of the drive in a hierarchical popup menu. You can use the menu to navigate your way to the folder you want to open. This is a true time and mouse clicking saver, especially with CD-ROMs.

✦ **GDOS printing:** If you have GDOS or NVDI installed, you can print text files using any installed GDOS font instead of using the boring printer fonts. This is a nice feature, but it lacks in some respects - a page numbering option would have been handy.

✦ **Tiling desktop images:** You no longer need to use a background image the size of the screen. Ease can tile an image to fit the desktop.

✦ **Background window colours:** Previous version allowed any window colour as long as it was white. The new version lets you select from 16 background colours for your windows.

✦ **Improved colour palette handling:** Better handling of colour images and icon when running in 16 and 256 colours.

✦ **Improved interface:** The user settings dialogue boxes have been improved.

✦ **New English manual.**

EASE 4

Ease File Window Contents Opti

Publisher: Application Systems Heidelberg

UK Distribution: System Solutions

Contact: 0181 693 3355

Price: £49.95 (upgrade from v3 £19.95)

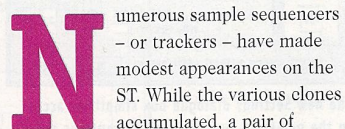
Requirements: All systems, hard disk recommended

Pros: Powerful and multi-tasking friendly • very reliable

Cons: Slow startup • memory hungry

SCORE: 8

Shiuming Lai samples the art of sample sequencing, the Protracker way.



are identical. After loading you are presented with a beautifully designed main screen which bristles with buttons, parameter boxes and all manner of high-tech features. An overscanned display is employed to cram everything in.

ProTracker ST comes in two flavours and the one you use depends on whether your machine is equipped with DMA sound (STFMs, for example, don't have DMA sound). Functionally however, the versions

Welcome to ProTrain

Integrated sample editing is a very welcome facility. It's graphically implemented, with block markers, snap-to-time, zoom, cut and paste and so on. Backing this up are special effects processing and sampler support. It's possible to use a MIDI device for input, and I tried this briefly on a Yamaha PSS-790 keyboard although the real time response is somewhat slower than claimed. The rigid timing of trackers doesn't suit real time recording in any case.

Running from floppies you can set up sample lists, which show all files on a disk of a given extension thus negating the need to wade through countless directories. Up to three lists can be used, and it's as easy as typing in a disk label.

Groovy

It's evident that a great deal of thought has been lavished on ProTracker ST - indeed the attention to detail is fantastic. For instance, holding the right mouse button increases repeat rates, and fundamental disk/file utilities and keyboard shortcuts all contribute to a more productive working environment.

Everything works very quickly and sound quality on a stock STe is a respectable 50kHz with full velocity control. Unaccelerated STfMs manage around 16kHz.

Accompanying the main program is a GEM-based standalone player (which also works as an accessory), assembler source code for the highly advanced replay routines used in the tracker itself and a disk containing 102 samples. Merlin throw in a bonus sample disk too but there's not much on this.

A well written and extremely comprehensive printed manual helps you get the most from ProTracker ST, including a tutorial section to complement the examples on disk. Although it's set in rather small type you can reprint it from the ASCII file. As a tool for creating soundtracks for games, demos or just messing around (if you can't play a real instrument like me) ProTracker ST is hard to beat, in terms of user friendliness, power or speed.

POSITION	3	↑	↓	CUT ETC.	BLOCK	CUR.	TRACK
PATTERN	2	↑	↓	AFFECTS:	ALL		
LENGTH	34	↑	↓	TRANS.	BLOCK	CUR.	TRACK
RESTART	0	↑	↓	AFFECTS:	ALL	SAMPLES	
SAMPLE	1	↑	↓	BLK	STRT	CUT	NOTE UP
VOLUME	64	↑	↓	BLK	END	EXCL	CUT
LENGTH	6326	↑	↓	CLEAR	COPY		NOTE DWN
REPSTRT	0	↑	↓	DELETE	PASTE		OCT UP
REPLEN	2	↑	↓	INS	DEL	INSERT	OCT DWN
							EXIT
2 OCTS: L BUF: 10AA TRANSP: CA TUNE: 57062							
MESSAGE: BLOCK: (0-31) FREE: 3694500							
0000	C-1-2	1000	G-2	2C10	---	0000	---
0000	C-1-1	0000	C-1-2	2000	C-1-2	7000	---
0000	C-1-2	1000	C-1-1	2000	C-1-2	7000	---
0000	C-1-1	1000	C-1-2	2C10	C-1-2	7000	---
0000	C-1-2	1000	C-1-1	2000	C-1-2	7000	---
0000	C-1-1	1000	C-1-2	2C10	C-1-2	7000	---
0000	C-1-2	1000	C-1-1	2000	C-1-2	7000	---
0000	C-1-1	1000	C-1-2	2C10	C-1-2	7000	---
31	---	0000	A-2	2C10	A-2	7000	---
0000	A-1-1	1000	A-1-2	2000	A-1-2	7000	---
0000	A-1-2	0000	A-1-1	2000	A-1-2	7000	---
0000	A-1-1	1000	A-1-2	2000	A-1-2	7000	---
0000	A-1-2	0000	A-1-1	2000	A-1-2	7000	---
0000	A-1-1	1000	A-1-2	2000	A-1-2	7000	---
0000	A-1-2	0000	A-1-1	2000	A-1-2	7000	---
0000	A-1-1	1000	A-1-2	2000	A-1-2	7000	---

A vast array of editing possibilities await you.

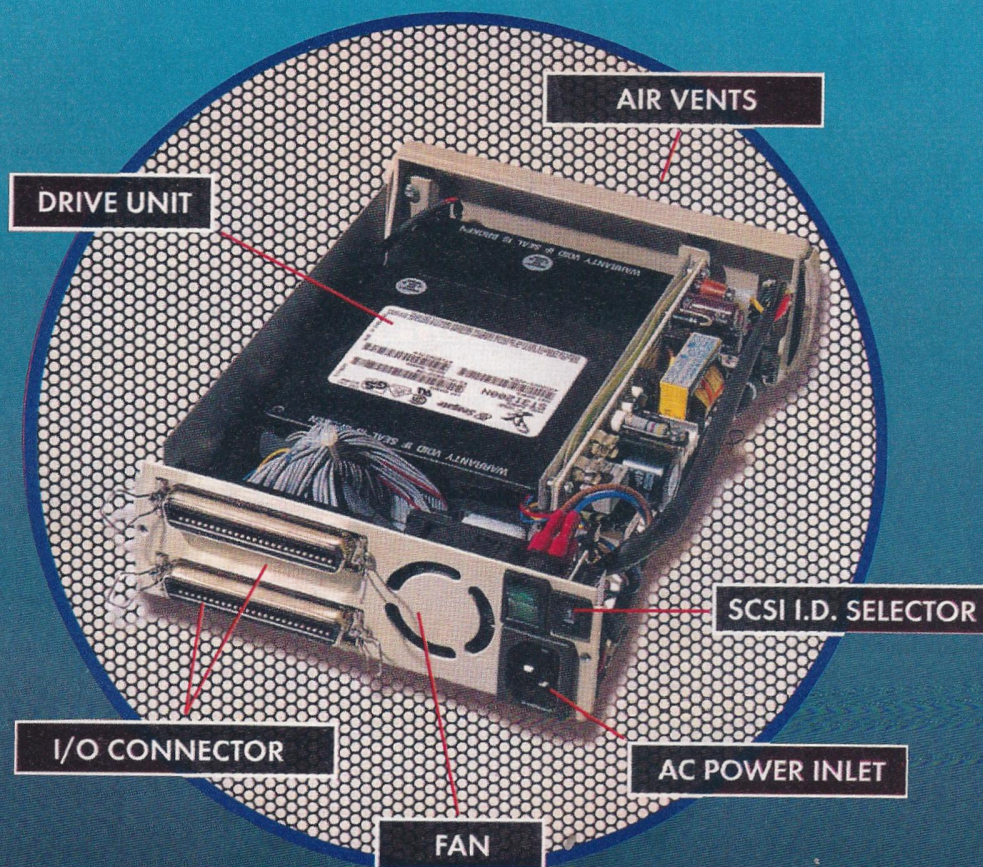
START: LEN: POS: ZOOM				
SAMPLER	CUT	COPY	PASTE	Z OUT
EFFECTS	REVERSE	MARK ALL		EXIT
POSITION	0	↑	↓	SPL 1: 50%
PATTERN	0	↑	↓	SPL 2: 50%
LENGTH	20	↑	↓	MIX SAMPLES: 1 + 1 = 1
RESTART	8	↑	↓	MIX
SAMPLE	1	↑	↓	FADE: 50%
VOLUME	64	↑	↓	OFFSET: 1536
LENGTH	5478	↑	↓	START: 100%
REPSTRT	0	↑	↓	END: 100%
REPLEN	2	↑	↓	/ \ - - N AFF: SAMPLE BOOST/FADE
SONGNAME: TEST SONG EDITED				INF 00:00
SAMPLENAME: PANFLMAJ. SPL				HILL

Here's where you can make a right mess of a perfectly good sample!



PROTRACKER ST V2.0				
EFFECTS	REVERSE	MARK ALL		EXIT
POSITION	0	↑	↓	SPL 1: 50%
PATTERN	0	↑	↓	SPL 2: 50%
LENGTH	20	↑	↓	MIX SAMPLES: 1 + 1 = 1
Publisher: Clever Bits, Norway UK Distribution: Merlin Contact: (01452) 770133 Price: £15				
Requirements: Any Atari with colour display Pros: Powerful /packed with features/elegant design/exhaustive documentation Cons: No support for eight voice modules/slow MIDI response				
				SCORE: 8

Ladbroke Computing

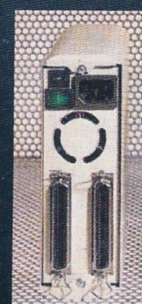
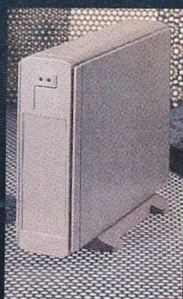


Datapulse Micra 544Mb

£289.99

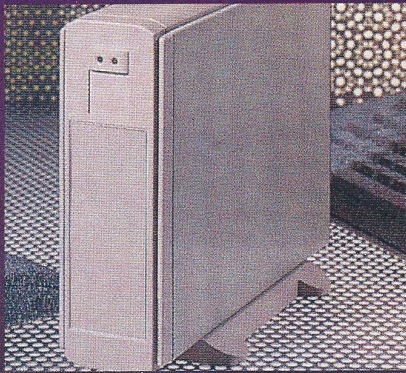
includes ICD LINK 2

Other models available.
Please call for details



33, Ormskirk Road, Preston, Lancashire PR1 2QP

TEL 01772 203166 FAX 01772 561071

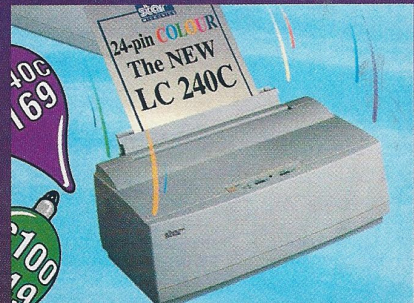


Datapulse 544Mb Micra 10ms	£230.00
Datapulse 1Gb Micra	£470.00
Datapulse Micra Quad Speed	
CDROM Includes Extensos	£290.00
ICD LINK 2	£69.99
GESOFT LINK	£64.99



Picture shown is of PC screen display, ST displays borders. Actual screen size 10.75 inches

- Fully compatible true high resolution monitor
- 14" Flat screen SVGA Monitor
- Tilt Swivel Stand
- .28 Dot pitch
- Includes ST Adaptor with built in sound
- 3.5mm Line out jack included
- When connecting to an STE we recommend using amplified speakers as STE monitor sound output is very quiet.



CANON BJ4000C	£329.99
Star LC240 24 Pin Mono	£139.99
Star LC240C 24Pin Col	£159.99
Citizen ABC 24Pin Colour	£155.00
Cannon BJ30 Mono Inkjet	£199.99
HP DJ600 Colour capable inkjet	£289.99
HP Colour cartridge	£18.80
Centronics Printer cable	£3.00
Many other Printer peripherals/consumables available. Phone for details.	

Only £99.99

Ladbroke Computing International are one of the longest established home computer dealers in the UK. We have developed an extensive customer service policy which involves testing of all hardware prior to despatch, to ensure that goods arrive in working order. Offering free advice and support over the phone and keeping customers informed. Although our prices are not always the cheapest, we do endeavour to offer consistently good service and backup.

All prices/specifications are correct at copy date 29/6/95 (While stocks last) and are subject to change without prior notice.

Ladbroke Computing

**33, Ormskirk Road, Preston,
Lancashire PR1 2QP
TEL 01772 203166
FAX 01772 561071**

How to Pay

You can order by Mail, Cheques/Postal orders made payable to Ladbroke Computing. Or give your credit card details to one of our telesales staff.

Delivery

Postal delivery is available on small items valued less than £40 (Normally £3), phone for details. For orders above the value of £40 this will be charged at £7 for insured courier. Saturday Delivery £20. All the above prices are for mainland U.K.

All Prices Include VAT

Repair Services

Our Atari trained technicians can repair ST's in minimum time at competitive rates. We can arrange for fully insured courier pickup and return delivery of your machine to ensure it's safety. We even have a same day service which will ensure your machine is given priority and, subject to fault completed the same day.

We can fit memory upgrades, PC Emulators, ROM upgrades etc.

We offer a quotation service for £15 for which we will examine your machine and report back with an exact cost for repair. If you do not wish to go ahead with the repairs then just pay the £15. However if you do go ahead then the quotation fee is included in the minimum charge.

Please note: the minimum charge covers labour, any extra parts are chargeable.

Quotation	£15
Minimum Repair charge	£35.25
Same Day Service	£15
Courier Pickup	£11
Courier Return	£7

Disk Drives

ST internal drive £19.99

Double sided double density mechanism for upgrade or replacement. Case may need modification. Phone for details.

Eclipse Mouse £7.99

290 dpi switchable ST/Amiga mouse. 2 microswitched buttons. Free mouse mat.

"SIMM" Memory modules

All SIMM upgrades come complete with test disk and instructions. Most STE's are compatible with SIMM's however please check existing boards before ordering (phone for details)

2 x 256K SIMM's	£4.99
2 x 1Mb SIMM's	£44.99
4 x 1Mb SIMM's	£89.98
2 x SIMM to SIPP adaptors	£3.00

Memory Upgrades

Marpet upgrades for the STF(M) are plug in and require no soldering providing MMU and Shifter chips are socketed (phone for details).

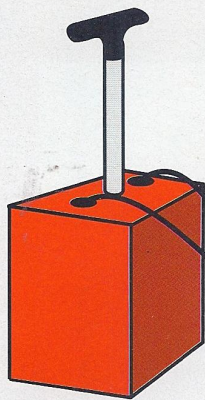
The Marpet board allows connection of standard "SIMM" memory boards (see prices below).

Unpopulated Marpet £24.00

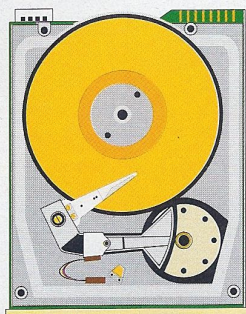
Multisync Monitor

- M1438S .28 Dot pitch
- Displays Low/Medium and high resolution on one monitor.
- Includes built in speakers.
- Includes ST Switchbox.
- 14" Colour monitor with tilt swivel stand

Now Only £309.99



DYNAMITE OFFERS ON ATARI HARD DRIVES & CD-ROM



850Mb Quantum Hard Drives from £219

Announcing a super deal on brand-new Quantum Trailblazer 850Mb SCSI hard drives.

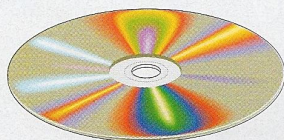
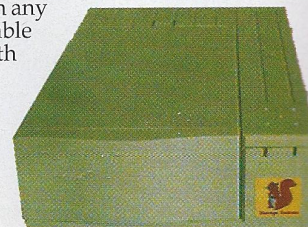
- High speed access (14ms) and a sustained data transfer rate of over 1Mb/s on an ST (maximum 4Mb/s on a fast SCSI controller).
- 2 year manufacturer warranty.
- Mount internally in 3.5" drive bays or externally using our

external units or your own case. Full instructions are supplied with every drive.

- All external cases feature internal cooling fans for exceptional performance even in the hottest conditions.
- Partition and format with any hard disk utility (a suitable program is supplied with the ICD Link 2).

- All bare drives include jumpers for SCSI ID and connection termination and drive status light. External units are pre-wired, ready to go. Suitable SCSI interface required for all SCSI hard drives.

Product	Price	Order Code
850Mb bare SCSI internal*	£219	AW850HDI
850Mb bare SCSI boxed external drive	£289	AW850HDX
850Mb bare SCSI boxed external drive + ICD Link 2	£349	AW850HDX2



Free CD-ROM containing 500 high quality Bitstream Fonts in both TrueType and Type1 formats.

SuperDouble CD-ROM Packs from £159

The SuperDouble is a tremendous value drive giving a fast 360Kb/sec transfer rate using its 2.4-speed drive and with a host of features, making it the ideal choice for those who want quality at the best price.

- 220ms access time, one of the fastest currently available

for double-speed CD-ROMs.

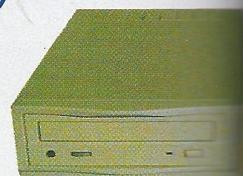
- Fast, sustained data transfer rate of up to 360Kbytes per second.
- PhotoCD (multi-session), CD-DA and Squirrel MPEG compatible.
- Full audio out facilities via phono sockets (external

model).

- Tray loaded - use both 12cm and 8cm CDs.

- SCSI 2 interface.

Each pack includes the latest version of the Extodos Pro CD-ROM drivers, as well as a free copy of the Bitstream 500 font CD-ROM (NVDI3/4 required). This CD-ROM is ideal



The boxed external SuperDouble CD-ROM drive

for anyone using their Atari for DTP, word-processing, or graphics.

Product	Price	Order Code
Super-Double bare internal drive + 500 Font CD-ROM + Extodos Pro*	£159	AWSDI
Super-Double boxed external drive + 500 Font CD-ROM + Extodos Pro	£229	AWSDX
Super-Double boxed external drive + ICD Link 2 + 500 Font CD-ROM + Extodos Pro	£289	AWSDX2

- | | | |
|------------------------------------|---------------------------------|---|
| ☐ AW850HDI | ☐ AWSDI | Delivery
☐ £6 Next Day
☐ £4 48Hr Service |
| ☐ AW850HDX | ☐ AWSDX | |
| ☐ AW850HDX2 | ☐ AWSDX2 | |

Name:

Address:

Postcode:

My credit/debit card details are: ☐ I enclose a cheque/PO

Card no:

Card expiry:

Signature:

Issue no (Switch):

Free Order Hotline



0500 223660

To order any of the products shown on this page (or any other HiSoft title) - just call us, free of charge, on **0500 223660**, armed with your credit or debit card; we will normally despatch within 4 working days (£4 P&P) or, for only £6 within the UK, by guaranteed next day delivery (for goods in stock). Alternatively, you can send us a cheque or postal orders, made out to HiSoft. All prices include VAT. Export orders: please call or fax to confirm pricing and postage costs.
© 1995 HiSoft. E&OE.

All prices include UK VAT @ 17.5%

* Internal SCSI units require power from a suitable power source, such as that provided by an external SCSI box.



HiSoft SYSTEMS

The Old School, Green
Bedford MK45 5DE

Tel: +44 (0) 1525 715151

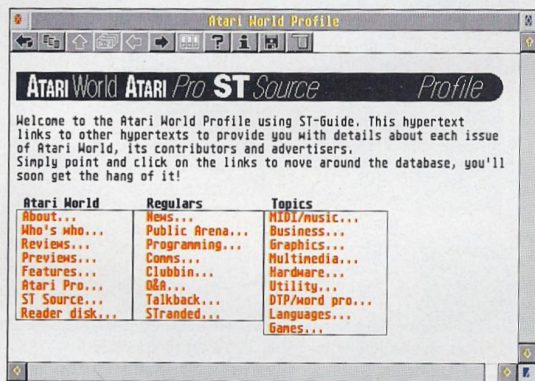
Fax: +44 (0) 1525 715151

email: hisoft@cix.compulink.com

<http://exxos.www.idnet.com/IMPULSE/atari/last/>

ST Guide

Thanks to ST-Guide hypertexts are now commonplace on the Atari platform. Joe Connor continues the series with a retrospective look at this ground breaking



We use ST-Guide to maintain the Atari World database on the reader disk.

A hypertext is a document which includes cross references to related topics. Cross references are called links and normally highlighted using a different typestyle so they stand out from the body text.

ST-Guide links can directly access other hypertexts, ASCII texts, images, popups and program resource files. Using any parallel running program (ie another accessory under single TOS) other image formats and sounds can be accessed from within hypertexts.

Many developers release on-line help hypertexts to accompany their applications and these offer some positive advantages over the traditional printed instruction manual or ASCII text file. For example, ST-Guide can be called from help buttons inside dialogues to display context sensitive help exactly when you need it - which has to be easier than wading through a manual.

Hypertexts are living documents which can evolve from programmers notes into text files and finally be spruced up with images and released. They're easier to maintain than a printed manual and your users are not left to flip between manual addendum's and outdated manual pages to distinguish current features.

Shareware authors have been quick to realise the potential of hypertext manuals

and it's becoming unusual to find new releases without hypertext manuals.

The system components

ST-Guide

The viewer can be installed either as a desktop accessory or renamed with a PRG extender and used as a stand alone application under a multitasking system or for occasional use from the desktop. ST-Guide automatically opens a GEM window containing the relevant hypertext from any supporting application when the help key or button in a dialogue is called.

A button bar across the top of the window includes icons to navigate hypertexts along with access to a tools menu including search, configuration, clipboard, printer and font selection options.

Using a smaller screen font makes it possible to display a help window without occupying the entire screen - even at standard ST screen resolutions. Monochrome image (IMG) support is included although these are not rescaled if you change the font size which can result in some odd (but harmless) screen layouts.

HCP

Short for Hypertext ComPiler, HCP takes ASCII source files along with any images and compresses them into a single HYP format file ST-Guide can display. The compression algorithm is based on the popular LHarc system (used to create LZH archives) and is available to any developers who wish to develop their own hypertext systems.

Utilities

The full ST-Guide distribution includes various utilities, a TTP program called RefLink to merge REF files together, STool to maintain a database of all your hypertexts and several others to convert hypertexts from 1st-Guide and other formats.

Third party add-ons

If you don't fancy learning ST-Guide syntax then don't - use an alternative utility designed to take the strain.

UDO, short for Universal DOcumentation, allows you to create all your documents in UDO syntax then convert them into the destination format. Because UDO is available for DOS and Linux and supports ST-Guide, ASCII, LaTeX, Rich Text Format, Pure C Help, Unix Manual Page, HTML and Windows Help format it's the one stop solution for hard pressed authors who haven't got time to learn lots of different hypertext formats.

ST-Guide Creator takes suitably formatted ASCII files and turns them into hypertexts. Take a look at both programs if you're considering hypertext authoring.

Other utilities include HypTree, which displays the structure of a hypertext graphically, to combat the disorientation many people experience after travelling several links. Remarker acts as a notepad to associate comments to individual hypertext pages and these appear automatically next time you open the page.

Distribution

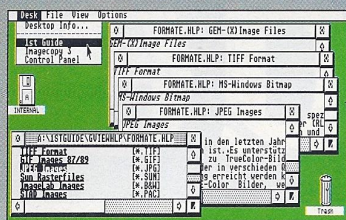
To encourage widespread support for ST-Guide the author released ST-Guide as fairware, which means it may be freely distributed, even with commercial applications.

Programs which include ST-Guide hypertexts can distribute the Lite version containing the viewer and a text file with details of the missing components but this is not available separately.

The full distribution is available from most PD/shareware libraries and online services and includes the compiler and other utilities which are essential to author hypertexts.

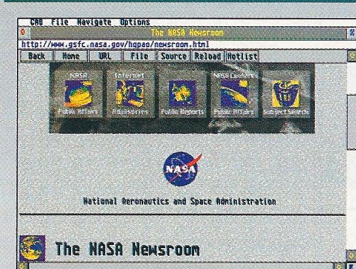
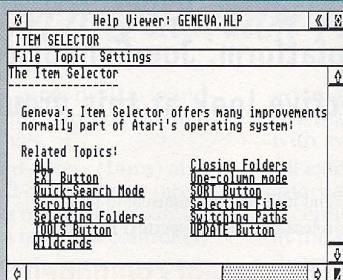
All regular users are expected to contribute a minimum of £6 to the author to ensure continued development which seems a small price to pay to ensure we don't fall behind the other platforms again.

Brothers in arms



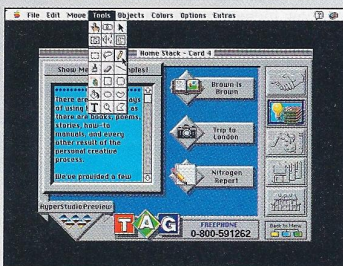
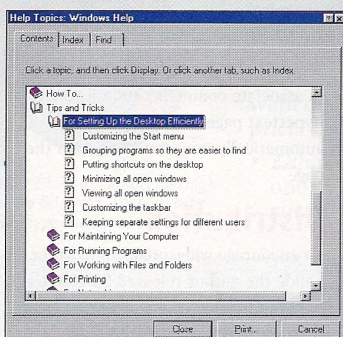
A few developers like Gribnif continue to support their own hypertext systems but with ST-Guide established as the de-facto Atari hypertext standard this seems increasingly like wasted programming effort.

Although ST-Guide was the ground breaker, 1st-Guide was the first Atari hypertext system. 1st-Guide offers hypertext and file viewing features. In retrospect it's odd the file viewing abilities became widely adopted but only a few popular programs, such as GEMView, utilise 1st-Guide HLP format hypertexts.

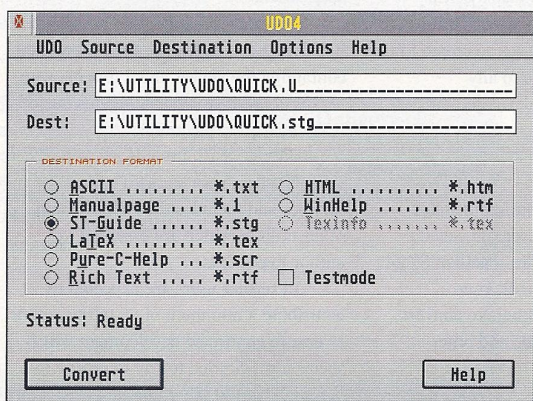


The Crystal Atari Browser (CAB, formerly HTML-Browser) looked set to challenge ST-Guide head on. It's ability to load HTML format documents offered cross platform compatibility along with advanced font and graphics handling but it soon became apparent the programs have different strengths -CAB is ideal for disk magazines or other documents which benefit from fully designed colour pages and ST-Guide, with its ability to be called from program dialogues and menus, is perfect for compact on-line help.

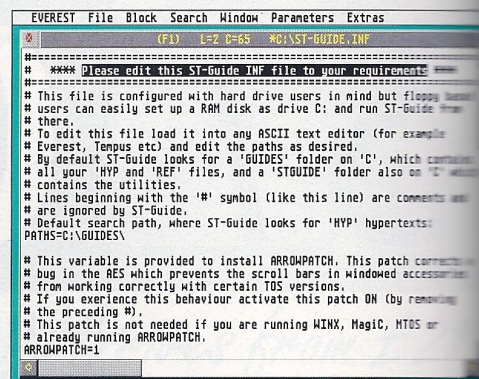
Hypertext was invented by Theodor H. Nelson in the seventies and launched on the Mac as Hypercard 'The people's programming language' - so far it hasn't taken over from real programming.



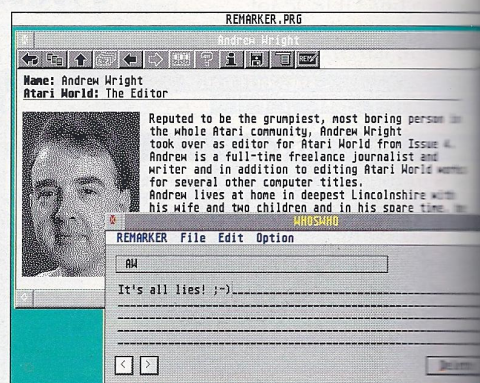
Naturally Microsoft played keep up with the Jones and launched their own 'Windows help system' which is still evolving under Windows 95.



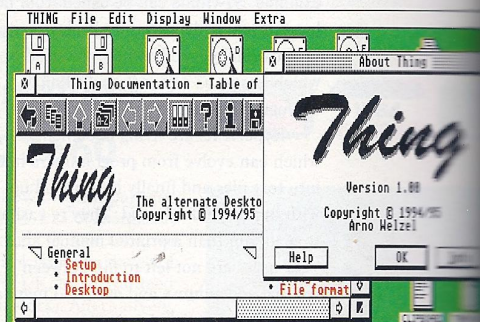
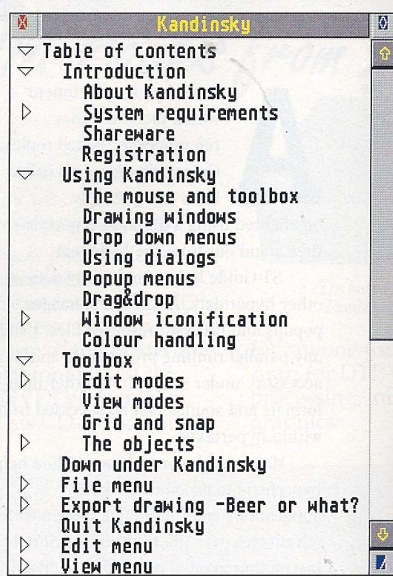
Learn UDO and keep your options open.



Edit your ST-GUIDE.INF file to your system, many people don't turn ARROWPATCH on so the scroll bars don't work properly.



Remarker adds its icon to the button bar, ready to add notes.



Thing Help buttons in dialogues call ST-Guide to display context sensitive help.

Platonix



Graeme Rutt (and I quote) "travels into the time of fairytales and legends"... Or does he?

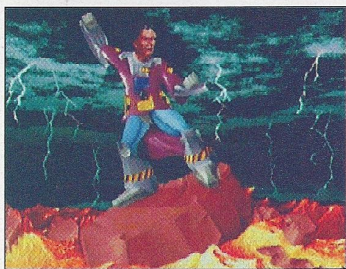


Scrolling can be disabled if you find it annoying.

The blurb that's appended to games rarely ceases to amaze me. There seems to be some unwritten rules that say that a) all Falcon games programmers think they're pretty good writers and that b) a 500 word story (in very small type) adds to the mystery and suspense of almost any game. Wrong, chaps, in both cases.

If you read the story with Platonix you'd think you were about to involve

yourself in some serious role-playing. Kings, queens, enchanted woods and magical stones are terms that are bandied about (in poor "Teutonic English") as if they were going out of fashion.



Swish presentation and a red-hot soundtrack give Platonix loads of atmosphere...

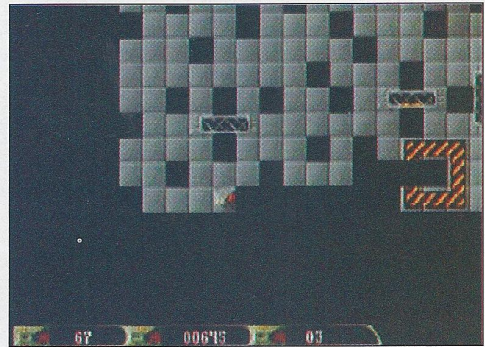
Unfortunately, I'm not into computer role-play – fortunately, neither is this game.

Instead, what we have here is one of those computer puzzle games – in the vein of Tetris, Minesweeper and Boulderdash – that have very easy to learn rules and incredibly complex internal logic. Most of these games have an addictive quality that's hard to quantify and, I'm very pleased to say, Platonix is no different.

Now I don't know if similar games exist, either on computer or off, but this one was new to me. "All" you have to do is guide a little block around, destroying another set of static blocks until that particular level is clear. Sounds easy, turns

out it's fiendishly hard and is a definite 100%, "oh just one more goer".

Actually, it starts out pretty easy but in the space of a few short screens turns into the kind of logic puzzle that turns you into a raving lunatic. A kind of battle occurs in your mind where you're trying your best to be Einstein but end up as frustrated as Schwarzenegger – on a very bad day, in both cases. Thankfully you can get back to the last level you got to by way of a "magic word".



...but hidden beneath the gloss you'll find a fairly simple puzzle game.

Agin' the clock

Oh, and it's against the clock, didn't I mention that? Actually, the clock aspect is the only "arcade" type element in Platonix. There are no other creatures chasing you, and little manual dexterity required (as long as you can hit the four cursor keys you'll be okay) but I think this just adds to the game. No random elements, just logic versus your average human lack of it.

I like Platonix a lot. I did find that it got hard rather too quickly for me – but maybe that says something about me rather than the game – but that hasn't stopped me going back for (a lot) more. Whether this makes it worth the asking price is open to question, I suppose it depends on how much you like these things. The game does have 100 levels, so should keep you occupied for a long time, and that in itself says "value for money" to me.

I'm not sure whether it matters or not with this type of game but the graphics and sound are pretty damn excellent. True-colour backdrops abound, with plenty of jazzy 3D effects and high-quality

"*.MOD" type music. The effect is rather more like a demo than a game and I'm willing to bet that that's where the programmers got their start in life.

If I do have one complaint it's about the packaging and instructions. Platonix comes on two high-density disks which each contain a couple of very large TOS files. Now I knew (or guessed) that you had to copy them onto hard disk and then run both to unpack the data – but will everyone else? Would it have really be that hard to either include the details in with the text (maybe getting rid of the "story") or, better still, writing a small installer utility?

Worse still, there are no directions as to how to play the game. It was only by trial and error that I found the cursor keys (and the space bar, which re-starts the level if you're up a blind alley). Can you turn off the music, use a joystick, etc? I don't know, I couldn't find a way to do it!

But I'm being mean here – these are things which shouldn't stop your enjoyment of what is a very playable, addictive puzzle game. If you're into such things then it comes highly recommended.

P L A T O N I X	
Publisher: Digital Vision UK Distribution: 16/32 Systems Price: £24 Requirements: Atari Falcon 4MB or more of memory, hard	disk. Pros: Addictive in the extreme/ great sound and graphics Cons: Poor docs
SCORE: 8	

BASIC

Ofir Gal continues his BASIC tutorial.

If you ever try to write a proper application, one that does some useful job, you will have to tackle the problem of data storage.

BASIC is one of the best languages when it comes to file handling. It offers several ways of storing data into files, ranging from text specific ones as in shown in previous tutorials, to all purpose commands, suitable for all kinds of data. This instalment of the BASIC tutorials will show you the basics of maintaining a database such as an address book.

The two major tasks in any database program are the user interface on top and the handling of the data itself in the background. We will start this month by looking at the program from the bottom up - starting with file handling.

Sequential Files

Most document files like the ones created by text editors and word processors are known as sequential files. They contain continuous data such as lines of text that must be read in order by your program. Typically, a LINE INPUT statement is used to read the lines into an array and the contents of the array can be then shown on screen or printed. If you wanted to only read the 10th line, you have no choice but to read the nine lines before it, one by one, before reaching the tenth line. There are workarounds, but none of them are simple. If you wanted to modify the tenth line, you would first need to load in the whole file into an array, modify the contents of the tenth array element and then write the complete file back to disk.

So why use sequential files to start with? The answer is simple - they are very easy to work with and they parallel the screen. You can see what the file will look like by simply replacing the file name used in the OPEN file statement. Use "CON:" to output to the screen instead of the file, or "PRT:" to print it. This can be useful if you

want to check what you are about to write to disk.

There is one useful variation of OPEN that you may find. APPEND mode can be used to add new lines to the end of the file without overwriting existing data. You can read more about the OPEN statement in the separate box.

Learn to read and write

You start by OPENing the file FOR OUTPUT using channel 1. This lets you write into a file using PRINT #1 or WRITE #1. PRINT # was explained briefly in previous months, but WRITE # is ideal for database management, because it allows you to define fields within each line by simply separating them with a comma. INPUT # does the opposite, reading the contents of the file. The following example shows how data is written and then read back using WRITE # and INPUT #.

Notice how the text strings are

```
fi$="E:\TEST1.DAT"
```

```
OPEN fi$ FOR OUTPUT AS #1
```

```
WRITE #1,"John Smith","123 London Road, Bromley, Kent","0181 123 4567"
```

```
CLOSE #1
```

```
OPEN fi$ FOR INPUT AS #1
```

```
INPUT #1,name$,address$,tel$
```

```
CLOSE #1
```

```
PRINT name$
```

```
PRINT address$
```

```
PRINT tel$
```

enclosed in quotes in the WRITE statement. Try to run the program and you will see how the three separate fields are loaded into the variables name\$, address\$ and tel\$. This flexibility makes writing a database quite easy. Let's look at a more complex example now. By introducing arrays, the program below can handle a



large number of records without much difficulty.

First the required arrays are defined with space for 100 addresses. Next, the file name is stored in the variable `fi$`. This saves you having to write the file name which is prone to disastrous mistakes in later OPEN calls. The file is then opened and a variable called `records` is set to zero. This variable serves as a counter inside the WHILE...WEND loop and is later used to find of the total number of records. You can't try this program properly just yet, because your TEST1.DAT file only contains one entry, but next month we will move another step towards creating a working database.

Using WRITE # and INPUT # you can easily deal

```
DIM name$(99),address$(99),tel$(99)
fi$="E:\TEST1.DAT"

OPEN fi$ FOR INPUT AS #1
records=0
WHILE NOT EOF(1)
INPUT #1,name$(records),address$(records),tel$(records)
INCR records
WEND
CLOSE #1
PRINT "Number of records =", records-1
```

John Smith
123 London Road, Bromley, Kent
0181 123 4567

Program terminated - press a key to exit

with records and fields to create and manage a database.

OPEN explained

The OPEN statement is primarily designed for reading and writing disk files, but has many variations that make it a powerful tool. OPEN has four basic modes:

OUTPUT is used for writing data to a file. If the file does not exist OPEN will create a new one, if the file already exists it is effectively overwritten.

INPUT lets you read the contents of the file.

APPEND is rarely used, but can be useful sometimes. It allows you to write additional data to the end of a file without overwriting its contents.

RANDOM is used to create random access files that can be useful for complex database applications.

The OPEN statement is always followed by a number of instructions to indicate the mode, file name and other variations. It takes the following format:

OPEN filename FOR mode AS #channel

The first parameter is the file name to use including its full path such as "E:\ADDRESS\TEST1.DAT". The mode parameter is explained above. The last parameter is the file channel or id. BASIC allows you to have up to 255 files at the same time and each file is accessed using the channel number. As shown below:

OPEN "E:\ADDRESS\TEST1.DAT" FOR INPUT AS #1

This statement will open the file, ready for reading using channel 1. All open files must be closed as soon as you're done reading or writing to them.

A less known feature of OPEN is that if the file name is one the reserved words listed below, the output is redirected to other devices instead of being written into a file.

"CON:" outputs to the screen

"PRT:" outputs to the printer port

"AUX:" sends the data to the modem port

"MID:" send data to the MIDI port

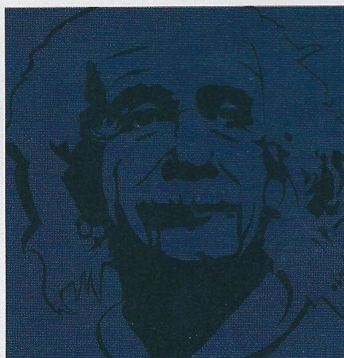
Commands

WRITE #channel_num: Writes data to the file specified in channel_num. Unlike PRINT #, the data is not formatted.

INPUT #channel_num: The counterpart of WRITE # is used to read non-formatted data from a file.

WHILE/WEND: A variant of the DO...LOOP statements. The loop repeats while the condition stated is true.

INCR: Increment the variable by 1. INCR j is a shortcut for `j=j+1`.



Arrays revisited

Last month I touched on the topic of arrays. The array concept is central to BASIC and many other programming languages. In BASIC, arrays are created using the DIM statement, followed with the name of the array and the number of elements it should contain. The statement `DIM a%(11)` defines an array of twelve integer variables, indexed from 0 up to 11. Array elements are accessed by using the array name followed by the element index number in brackets. If you wanted to print the contents of the third variable in the array simply use: `PRINT a%(2)`. You can do anything with array elements that you do with variables - add them up, assign values to them or any other mathematical or logical operation.

When using text files in your programs, it's very convenient to use string arrays to store the file contents. Normally, each text line is stored into an array element. `DIM a$(99)` for example, defines an array large enough to store 100 strings or line of text. It is very important that you don't attempt to read beyond the last element in the array. The following example will produce a "Subscript out of range" runtime error when compiling for safety, or a crash if you compile for speed.

```
DIM a$(20)
FOR j=0 TO 21
PRINT a$(j)
NEXT j
```


COMPO

HUNDREDS OF PRODUCTS FOR THE ST, TT AND FALCON

**FOR EVERYTHING TOS, COMPO SOFTWARE HAS OUTLETS IN
GERMANY, HOLLAND, FRANCE, USA AND UK. A TOTAL SERVICE
INCLUDING HARDWARE, SOFTWARE, FITTING & REPAIRS.**

Buy from COMPO Software and reap the rewards!

- ★ Widest range of ST Hardware and Software listed in our free catalogue
- ★ FREE technical support when you want it – open 3pm to 8pm every weekday
- ★ Convenient ordering – 9:30 am to 7pm Monday to Friday, 10am to 5pm Saturday, or by 24 hour answering machine outside these hours. 24 hour fax orderline
- ★ Dedicated COMPO conference on the CIX bulletin board for modem owners
- ★ Stable and secure company. Over seven years in the Atari market (four years in the UK) with worldwide sales and marketing
- ★ New Showroom dedicated to Atari computing now open. 'Drop in' Tue/Wed/Thur 10am to 7pm. Callers at other hours, including Saturdays, are very welcome by appointment
- ★ 48 hour despatch for items in stock – check availability before ordering by post if you need this guarantee
- ★ Free delivery anywhere in the UK. Add £5 for guaranteed next day delivery in the UK, £5 for carriage to mainland Europe and £10 for Rest of World
- ★ Easy payment accepted   
- ★ Additional charges may apply for bulky items such as computers and monitors – check when ordering these items

Just pick up the phone and you're on your way to talking to the Atari experts. Because all we sell is Atari hardware and software we like to think we know a bit about what we are talking about. We're happy to take time to understand what you want to achieve, and then recommend a solution. Choose from our wide range and have it delivered to your door in just a few days.

**As well as our own product range COMPO Software is also exclusive UK agents for:
Gribnif, Atari UK (for TOS upgrades), Overscan, NO! Software and COMPO
Software GmbH**

**We also sell products from many companies including:
Atari (complete product range), Arnor, CGS,
FaST Club, HiSoft, Marpet Developments, System Solutions, The Upgrade
Shop, Titan Designs.**

Sales and Enquiries UK 01487 773582
Sales and Enquiries USA 415 355 0862
24 Hour Fax UK 01487 773581
24 Hour Fax USA 415 355 0869
Technical Support UK 01487 773521

COMPO

**COMPO Software Ltd,
Unit 3 Green Farm,
Abbots Ripton,
Huntingdon PE17 2PF**

All prices include VAT and Carriage. All trademarks and
Registered trademarks acknowledged. All prices
subject to change – confirm prices when ordering.
Products offered subject to availability.

**SEND FOR YOUR FREE COPY OF THE
COMPO SOFTWARE CATALOGUE.**

Please rush me my FREE copy of the COMPO Software Catalogue.

Name Company

Address

..... Postcode

Telephone..... Fax

Mail to COMPO Software Ltd, Unit 3 Green Farm, Abbots Ripton, Huntingdon PE17 2PF.

HUGE

selection from
the finest range
of **HARDWARE**
for **TOS**
computers

Computers

Atari 520 ST FM
Configured to your needs
.....from £179
Atari 1040 STefrom £229
Atari Mega STe, STacy
and TT
Occasionally available Call
Atari Falconfrom £499
Family curriculum
2 packadd £20
Discovery extra
packadd £10

Memory

See the page over for
memory upgrades

Monitors and Video enhancements

ST 14" Mono Monitor
without sound£129
ST 14" Mono Monitor
with sound£149
Screenblaster£69
Autoswitch Overscan
Essential for ST FM/Mega ST
Owners£49
ST monitor adaptor
for Falcon£12.99
VGA monitor adaptor
for Falcon£12.99

TOS Upgrades

TOS 1.4 ROMs£19
T-Board 64
Switchable TOS 2.06 for ST
FM£54
T-Board 68
Software switchable TOS
2.06 for STe£54
STe Switch
Hardware switchable TOS
2.06 for STe£39
TOS 2.06 ROMs only£29
Falcon upgrade
to TOS 4.04£39

Miscellaneous

COMPO CD ROM ROM
Complete CD kit for any
ST/TT/Falcon just plug in
and go£199
PC Speed£39
AT Once PC Emulator£79
Clock cartridge£15.99
Mouse joystick cable -
single£3.99
Mouse joystick cables -
twin£5.99
High density drives£call
External 5 1/4" drive kit
.....£24.99

Spares and Repairs

Repairsfrom £20.00
Blitter Chip For most ST FMs
and Mega ST£49
PSU for ST£39
PSU for Falcon£69
PSU for STacy£99
Screen for STacy£149
Custom IC's for ST, Mega,
TT, Falcon etc£call
Video shifter chip£19
STe motherboard£129
ST FM motherboard£79
ST Keyboard£40
Falcon keyboard£60
TT/Mega STe Keyboard£50

**No-nonsense money
back guarantee.**
If you are not
completely satisfied
with anything you
buy from us, return
it within 30 days for
a full refund

£129



That's Write 3
Due out at the end of July.
Probably the most powerful ST
word processor produced.

£229



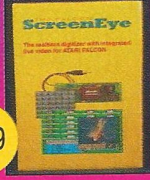
CompoScript
PostScript printing to non-PostScript print-
ers. Great for previewing Postscript docu-
ments before typesetting.

£79



TrakCom
The new standard track-
er for the Falcon.

£249



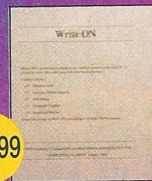
ScreenEye
Real-time video digitiser
and screen grabber for
Falcon.

£59



SPEEDOGDOS
New version with enhanced colour
output, Type 1 and True Type font
support available now.

£29.99



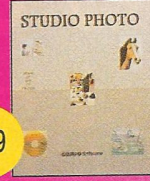
Write ON
Classic word
processor for the
novice/hobby user.

£79



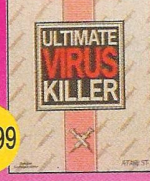
MUSICOM 2
New version now available.
Features include cut and paste,
mixing and much more.

£49



Studio Photo
24-bit Photo retouching
and image editing for all
STs and Falcons

£12.99



Ultimate Virus Killer
Essential for any ST
owner. New version out
now.

£199



Falcon Speed
286 emulator for Falcon and
colour Windows drive



**ORDER
BY PHONE**
9.30am to 7pm
Mon-Fri,
10am to 5pm Sat
01487 773582

Atari FOR
New Range, Best New Products, Unbeatable Service

£129



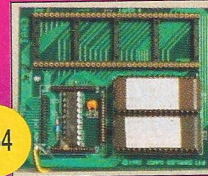
AT-Speed
286-based emulator for STs

£55



PC Speed
The best selling hardware emulator for the ST.

£54



T-Board 68
Switchable TOS 2.06 upgrade for STe.

£54



T-Board 64
Switchable TOS 2.06 upgrade for STFM.

£49



Interface
The ST resource file editor - new version 2.3
with 3-D effects. English software but with
German manual.

**ALL PRI
INCLUDE V
DELIVERY
MAINLAN
OR POS
COUPON
FREE CA**



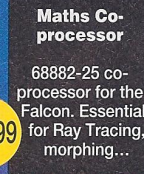
£49

Autoswitch OverScan
Enhanced screen display for all STs. Includes full support for STFM or Mega ST. Essential for DTP and Music.



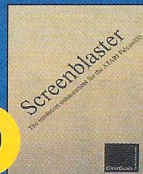
£59

Geneva
Multi-tasking for all STs. Includes full support for AES 4.0 - all STs get Falcon-like interface features.



£29.99

Maths Co-processor
68882-25 co-processor for the Falcon. Essential for Ray Tracing, morphing...



£69

Screenblaster
Now with new v2 software - fully configurable.



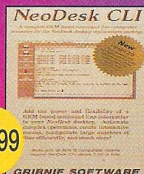
£29

TOS 2.06 ROMs
Replacement ROMs for STe computers only.



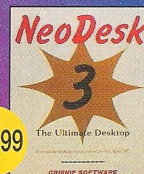
£59

Kobold
File management utility. Super fast copy, delete, format...



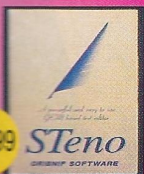
£19.99

NeoDesk CLI
Command line interface for NeoDesk.



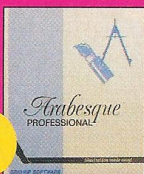
£19.99

NeoDesk 3
The classic desktop replacement.



£17.99

STeno
Text editing accessory for Stalker.



£99

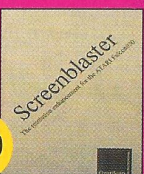
Arabesque Pro
Powerful vector and bitmap graphics program.



£59

NeoDesk 4.0 New Release!
Features include:
Multitasking support
Grouped objects
Much, much more

NeoDesk 4
Available now. Lots of new features including multi-tasking support makes this the new standard for ST desktops



£9.99

Screenblaster Upgrade
Software upgrade for Screenblaster.



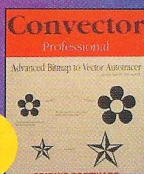
£299

ColorBurst
Falcon true-colour hand scanner.



£39.99

Stalker
Powerful commercial communications software packed with features including background Z-Modem file transfers.



£79

Convector
Easy to use, fast autoritrace program. Includes a special TT version that uses maths co-processor.

HARD DRIVES CONFIGURED TO ORDER

For a hard drive for any Atari TOS computer you need four basic components; a drive mechanism, a case, a cable and driver software. The mechanism and case are the same for any ST. The cable depends on your Computer. All our drives come supplied with software and are formatted ready to plug in and go.

Mechanisms

Our stocks of mechanisms changes regularly. Here are some sample prices:-

40MB (Recycled)	£40
40MB (Unused)	£60
340MB new Quantum	£129
840MB new Quantum AV	£199
1GB new Quantum AV	£399
1GB new Seagate	£349
2GB new Quantum AV	£699

Cases

Basic recycled case	£30
New deluxe case	£55

Cable

Top Link
Required for ST, Mega ST that does not already have a SCSI hard drive attached

£60

TT SCSI cable	
Connect directly to TT SCSI port	£15
TT Hard Drive Kit	£20
Falcon SCSI 2 cable	
High Density SCSI cable for Falcon	£15
SCSI to SCSI cable long	
For connecting two standard SCSI mechanisms	£10
SCSI to SCSI cable short	
Connect two SCSI devices stacked one on top of the other	£8

Please call to discuss your particular requirements, availability and current prices.

HUGE
selection from
the finest range
of **SOFTWARE**
for **TOS**
computers

Word Processing

Write ON	£29
That's Write 2	£99
That's Write 3	£129
That's Write	
1.5 to 2 upgrade	£29.99
That's Write 2 to 3	
upgrade	£34.99
Write ON upgrade to	
That's Write 1.5	£24.99
Dictionary Disks	
German, French, Spanish etc	
for That's Write	£34.99
Protext 6.61	£79.95
Protext upgrades	£call

Fonts & Drivers

SPEEDO GDOS 5	£59.00
SPEEDO GDOS	
Upgrade	£29.99
Font Pack Office	£49
Font pack Gold	£49
Office and Gold bundle	£89
CompoScript	£99
C-Font Calamus font	
converter for WriteOn and	
That's Write	£9.99
BJ10e	
Driver for Write ON	£4.99
Epson Stylus/570 fonts	
Write ON and That's Write	
fonts disk	£14.99
Epson internal fonts	
Epson LQ850 and Canon	
BJ10ex support	£12.99
HP DeskJet 500	
Write On and That's Write	
fonts disk	£14.99

Music

Pro 24	£14.99
MUSICOM 1 Classic direct to	
disk recording	£49.00
MUSICOM	
1 to 2 upgrade	£29.99
Trackom	£49

Graphics

Apex media	£119
Studio Photo	£49
Arabesque	£99
Convector	£79

Utilities

Neodesk 3	£29
Neodesk 4	£59
Neodesk 2 to 3 upgrade	
	£9.99
Neodesk 3 to 4 upgrade	
	£29.99
Geneva	£59
Neodesk 4 and Geneva	
bundle	£99
NVDI 2.5	£29.95
NVDI 3	£59.94
Kobold	£59.95
ICD Pro Utils	£39.95
UVK	£9.99

Miscellaneous

Stalker	£39.99
STeno	£17.99
Power CD	
Demos of Commercial	
German software	£Call

**No-nonsense money
back guarantee.**
If you are not
completely satisfied
with anything you
buy from us, return
it within 30 days for
a full refund

COMPO

TURN OVER FOR ORDER FORM AND MEMORY PRICES

KILLING IMPACT



ST FORMAT 85% 'BUY IT NOW!

KILLING IMPACT, A TRUE COLOUR ADVENTURE
ARCADE GAME WITH 5 HUGE LEVELS WITH MUSIC
WRITTEN BY PROFESSIONAL MUSICIANS.

ADDICTION IS YOURS FOR £29.95
OVERSEAS £32.95

REQUIRES A 4 MEG
FALCON, HARD DISK
AND ANY MONITOR



I WOULD LIKE TO ORDER A COPY OF MOONSPEEDER FOR MY FALCON AND ENCLOSE A CHEQUE/ P.O./ CREDIT CARD
NUMBER FOR £29.95

NAME:..... CHEQUES TO BE MADE PAYABLE TO MERLIN

ADDRESS:.....

CREDIT CARD No:..... EXPIRY DATE: .../... SIGNATURE:.....

Bookworm!

Ben Hall turns the page on a couple of newly-released music books...

Sequencer Secrets

MIDI sequencers are complex beasts at the best of times, and the wealth of functions on offer by the heavyweights like Cubase and Logic can often bewilder, rather than endear. The aim of Sequencer Secrets is to supply the MIDI musician with an arsenal of useful tips and advice. The book is not a tutorial for any particular sequencer, it stays fairly general, it's more like an experienced user sitting behind you, saying "how about trying this..."

The book, written by Ian Waugh, is conveniently organised into logical sections, with each tip taking the form of a short paragraph or two. There are sections on quantising, tempo, composition and even live sequencing, so it covers all of the important bases. There are over 150 tips in total, so there is bound to be something to satisfy all but the most powerful of power users. It is written in a friendly and easy going style, without being at all patronising.

The book has small boxout sections denoted as "Projects", which are little exercises for the reader to carry out using their own software. This is an excellent idea, and encourages readers to



actually try out and investigate the various functions that their sequencer software contains. There is also a small troubleshooting section that can help you out of those tight spots!

So out of the 150 or so tips, how many are actually useful? Well, the tips range from the basic "save often" advice up to simulating an analogue sequencer. Certainly if you really know your stuff you will have come across many of them, but for a beginner they are much more useful. That's not to say a more experienced user will not benefit from this book - there are quite a few nice little things to try, which I

won't go into here!

The difference about books like these compared to the average manual is that they are focused on how to achieve the desired results, rather than simply describing a function, and as such they are much much clearer than any manual. Sequencer Secrets certainly does not fail on this aspect, and for a beginner, or someone who feels they are not getting the most out of their software, it's an excellent buy. It really is a practical book that encourages tinkering. For the experienced user though, it's perhaps less of a bargain, but still worth checking out.

SEQUENCER SECRETS

Publisher: PC Publishing
Contact: 01732 770893
Price: £6.95

Pros: 150 plus tips • concise • practical
Cons: Less useful for experienced users



SCORE: 7

Music Technology Reference Book

MAs you may have guessed from the title, this is meant purely as a reference book, and aims to provide a comprehensive range of information on all areas of modern music technology, even up to and including video and multimedia applications.

This one is penned by Peter Buick and ex-Atari World editor Vic Lennard, and is an absolute mine of information. If you need to know the MIDI file format, the frequency ranges of various instruments, or hints and tips on mixing you will find it here. In fact, there is so much information that this one book could conceivably replace all other music reference books you may have!

We want information...!

Once again the book is very nicely presented, and is organised into logical

sections - Midi, Synthesis, Sampling, HD Recording, Music, Recording, Audio, Electronics, Computing/Multimedia, a contacts section and a useful glossary of terms. It contains a wealth of information, mostly technical, but also some really useful guidelines and advice. Most sections are impressively detailed, and yet each manages to be remarkably concise, which makes it very easy to find the information you require.

The Midi section covers everything you'd ever need know (short of reproducing the Midi specs of specific devices), and is easily the most comprehensive Midi section I've seen anywhere. As well as all the standard Midi specifications you will find documentation of all the various Midi extensions like Sample Dump, Show Control, Midi Timecode and Machine Control, General Midi standards and some useful Midi troubleshooting advice. The synthesis section briefly covers the various types of synthesis (though it is curiously missing

the relatively new area of Physical Modelling). You will find descriptions on subtractive, digital, FM and additive synthesis, and basic synthesiser theory. In addition this section includes a lot of microtuning information, and basic sequencer operation.

The chapter on sampling is based more on practicality rather than theory, so forget about the physics of finding out how and why samplers work. You will find many tips on effective sampler and memory usage. There is also a description of the Windows WAV file format.

The music section covers basic music theory and gives charts of scales, chords and guitar fingerings. It even contains quite a few different sample drum machine patterns for various different styles of music. The recording and audio sections cover audio frequencies, microphone placement, and various physical properties of sound. There is a useful guide to equalisation, and there is really good advice on organising productions and effective studio management, both for the home user and the professional.

The electronics section is thankfully small, and covers basic electronics - resistor code values and basic electronics formulae. It's great if like me you've forgotten most of the electronics you ever did at school! The book also features many blank charts designed for you to photocopy and re-use, including Midi and 24-track planners, subtractive synthesis charts, and so on. I personally didn't find these particularly useful, but I'm sure there are many people who will. Put them in the "nice little extra" category. There really isn't a single wasted page in this book - it is simply crammed full of useful information. Special mention goes to the Midi, music and production sections, which are especially good. It goes further than standard reference works by including advice as well as tables of information. Anyone in the modern area of music would do well to have a copy of the Music Technology Reference Book sitting on their shelf. Recommended.

MUSIC TECHNOLOGY REFERENCE BOOK

Publisher: PC Publishing
Contact: 01732 770893
Price: £12.95

Pros: Comprehensive • concise • clear
Cons: Fairly technical



SCORE: 9

IMAGE

POSITIVE

24 Bit Image Processing for any Atari...

- ◆ Supports all ST, TT and Falcon screen resolutions.
- ◆ Allows the editing of 24-bit True Colour graphics on an ordinary ST!
- ◆ Compatible with GDOS, SpeedoGDOS, NVDI 3, GEM compliant graphics cards, ScreenBlaster, BlowUp030, virtual memory drivers, TT Fast RAM, Multi-TOS, Geneva, MagiC, MagiC Mac and Gemulator.
- ◆ Powerful block handling includes the choice of 11 different overlay methods with variable transparency.
- ◆ Supports the creation of 3D 'random dot' stereograms and foreground 'enhanced' stereograms.
- ◆ Uses the Falcon's DSP for processor intensive tasks and JPEG decoding.
- ◆ Outputs to most popular models of colour and monochrome dot matrix, inkjet and laser printers.
- ◆ Images can be rotated to any angle in clockwise and anti-clockwise directions, to an accuracy of one degree.

- ◆ Images can be rescaled up to more than 400% of original size without noticeable loss of quality.
- ◆ Images can be printed to disk if memory is low, then printed directly from the GEM Desktop.
- ◆ Numerous useful image processing filters are included, along with the ability to create your own.
- ◆ Supports 256 level (8-bit) masking. Includes a configurable gradient tool to aid mask creation.
- ◆ Allows processing of user defined areas (both regular and irregular) without affecting other parts of the image.
- ◆ Includes a number of localised retouching tools with full user configurability.

Positive Image requires at least 1 Mb of memory. A hard drive is recommended, though not essential. For a limited period, we are offering the package at an introductory price of just £65 (normal price £79) plus postage and packing (UK - £2.00, Europe - £5.00, rest of world £10.00). Payment in UK currency only - credit card or banker's draft preferred. Overseas customers, check first to see if we have a distributor in your country. A usable demo version is available from Floppyshop for just £1.00.

Floppyshop

PO Box 273,
Aberdeen AB9 8SJ

Credit Card Line Tel/Fax 01224 312756, Technical Helpline Tel/Fax 01224 586208



Disk drives



The basic Atari ST design was well ahead of its time. The design allowed for not only two double density 3.5 inch floppy drives but also up to 8 high speed SCSI hard drives. The IBM PC designs of the time had clunky old ST506 hard drives with abysmal transfer rates and 5.25 inch floppies holding just 320K. The Apple Mac was the only other high speed machine around and at that time was vastly more expensive. The TT saw an improvement with direct support for high density floppies and a proper SCSI port and the Falcon continued the trend with the addition of SCSI II ports for even faster data transfer.

The floppy drives

The ST uses the Western Digital WD1772 floppy drive controller chip. This one chip solution gives a complete floppy controller in a 28 pin dual inline package. The early STs only had a single sided drive which could hold 360K of formatted data, once

double sided drives became available at realistic prices they could be directly plugged in to gain the advantage of double the capacity.

The use of this chip as the controller continued into the STe and also the early TTs and Mega STes, later versions of these machines had an upgraded chip affectionately termed the 'Ajax' chip. The Ajax is a pin for pin equivalent

chip which can run reliably at much higher clock rates and so allow the use of high density drives holding a full 1.44 Mb of data.

If any users have an external floppy as well as an internal one beware of a common problem; the floppy drives are also partly controlled by the Yamaha sound chip, this drives the side select and the drive select lines, these lines are not buffered and the presence of two drives on the side select line can prevent the signal from working correctly. The symptoms of this are weird corruption when opening a drive but only on double sided disks, single sided ones work perfectly. If this happens the best solution is to remove one or both of the pull up resistors on one or both of the floppy drives - look for a 1K pull up resistor between the side select line and +5V.

MS-DOS

The ST was based heavily on the original Apple Mac but whereas the Mac used weird floppy drives that actually changed speed depending on which track was accessed and used a totally alien format the ST stuck with a disk structure very similar to MS-DOS. The structure is so similar that disks formatted on a PC can be easily read and written to on an ST. This makes transferring data between machines very easy, if images need to be exchanged then consider Image Copy from the FaST Club, compress the images with a JPEG compression put them on a floppy and both machines can read them instantly. The similarities extend to 1.44MB floppies and so these are easily exchanged as well.

Hard drives

Where the floppy disk is literally a floppy piece of thin plastic coated with a magnetic material the hard drive is a hard

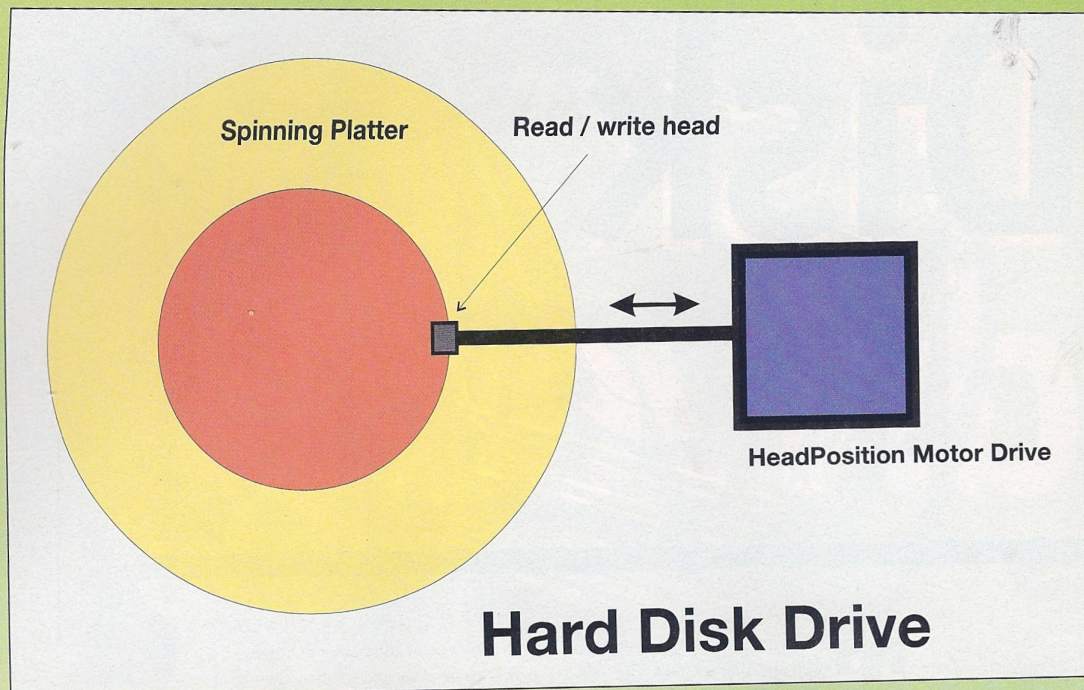
rigid platter usually of aluminum or glass coated with magnetic material.

The benefit of a rigid medium is that it can be spun far faster (up to 7000rpm compared with the 300rpm of a floppy) and by incorporating it in a hermetically sealed box the heads can fly very close to the disk allowing far greater data densities (currently up to 4GB in a single 3.5 inch drive). The space inside the sealed box is usually dry nitrogen at a positive pressure - this keeps out all dust and prevents any corrosion inside. If the lid is lifted on a drive, a hiss is heard as the over pressure nitrogen escapes, not as air rushes in to fill a vacuum as is commonly believed!

The heads on a floppy are moved by a low speed stepper motor which is quite sufficient for the job, hard drives need a better and faster head moving mechanism. Top end drives use a voice coil which acts in a similar way to a loud speaker pushing and pulling the heads over the surface of the disk very quickly, cheaper drives use stepper motors but much higher accuracy than those used in floppy drives.

As drives get higher capacity the data is obviously packed together closer and closer. If the ambient temperature changes the platters expand and so the chances of the heads being over the wrong track increase. To counter this effect drives have to recalibrate themselves. Unfortunately, many drives have to temporarily pause in their data transfers whilst this calibration is performed, for normal data operations this doesn't matter but if direct to disk audio is being written it is catastrophic! To overcome this more modern large drives can thermally recalibrate themselves without any interruption to the data flow.





The hard disk drive mechanism

SCSI

The SCSI standard (a development of the older SASI standard) allows up to 8 devices to be daisy chained from one SCSI controller, each having its own unique address ranging from zero to eight. The Atari unfortunately did not have a complete SCSI controller built in and so an extra box to convert from the Atari's ACSI to true SCSI is required. The best known of these converters is the ICD Link; this little box allows any ST or STe to access a wide range of SCSI devices including drives, CD ROMs, streamers, scanners and exchangeable hard drives.

The base ST did not have a buffered port and so take great care with DMA cable length, too long a cable will result in data corruption and unreliable operation.

The STe had a buffered port but unfortunately also had a design fault in the DMA circuitry resulting in data corruption on hard drives after running for a few hours, the only cure for this is a replacement with a reworked DMA controller chip. Fit a C398739 to replace the older C025913-38.

The TT which was originally marketed as a high end workstation had a true SCSI port, this even implemented parity checking and could drive any SCSI peripheral directly, this was designed with the old but reliable 5380 chip. The Falcon whilst a much more recent design also uses the same 5380 chip as in the TT.

IDE

The relentless march of the PC does at least drive prices down. The hard drive that became most popular was the IDE (Integrated Drive Electronics) drive, these are available at incredibly low prices and

can be used directly in the Falcon. The only snag is that in order to fit inside it has to be the more costly 2.5 inch drive. The controller is incorporated into the Falcon and both IDE and SCSI drives can co-exist quite happily.

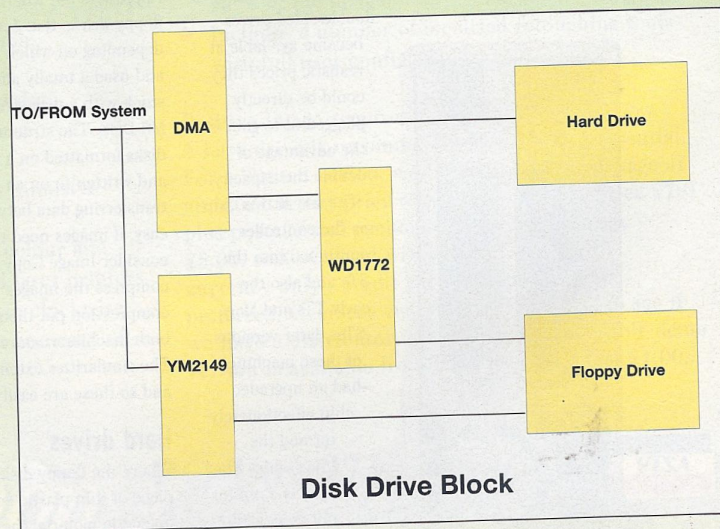
DMA

A technique invented for main frame computers was implemented in the ST, once again this technique is only now being built into IBM PC systems. DMA (Direct Memory Access) is a system where data is allowed to be put into memory without the CPU having to move it around.

In a conventional system every byte that comes from the drive has to raise an interrupt, the processor has to handle that interrupt, transfer the data to memory and then release control, this happens for

every single byte of data – a very inefficient process. The data rate from a floppy drive is low enough to not matter but from a hard disk the data has to be slowed down dramatically by interleaving thus reducing the data rate to a trickle.

With DMA a special DMA controller chip can take over from the processor and control data transfers, when data is requested from the drive the DMA controller is loaded with a position in memory to put the data, how many bytes to transfer and a counter of how many bytes have been transferred, the processor then relinquishes control whilst the data is moved at full speed. Once the data has moved the DMA controller signals completion and the processor carries on its usual tasks.



The disk drive block

Interleaving

As a hard drive spins so fast the data comes off of the drive at a tremendous rate, each track is divided up into sectors, each sector holding 512 bytes and each track having typically 80 sectors. If the data cannot be handled fast enough the next sector will be ignored until it comes around again (after a full revolution of the drive) this possible delay could occur every time more than one sector is required slowing the transfer down tremendously. If however the data when written skips a number of sectors the system has time to catch up between sectors and the data rate, whilst not optimum can be increased. The number of sectors left between each one is termed the interleave ratio and has to be specified at format time.

Most good software formatting programs allow changing of the interleave rate but whereas an old IBM PC would have needed an interleave of as high as 6:1 an ST can handle a straight 1:1 unless the drive is particularly fast.

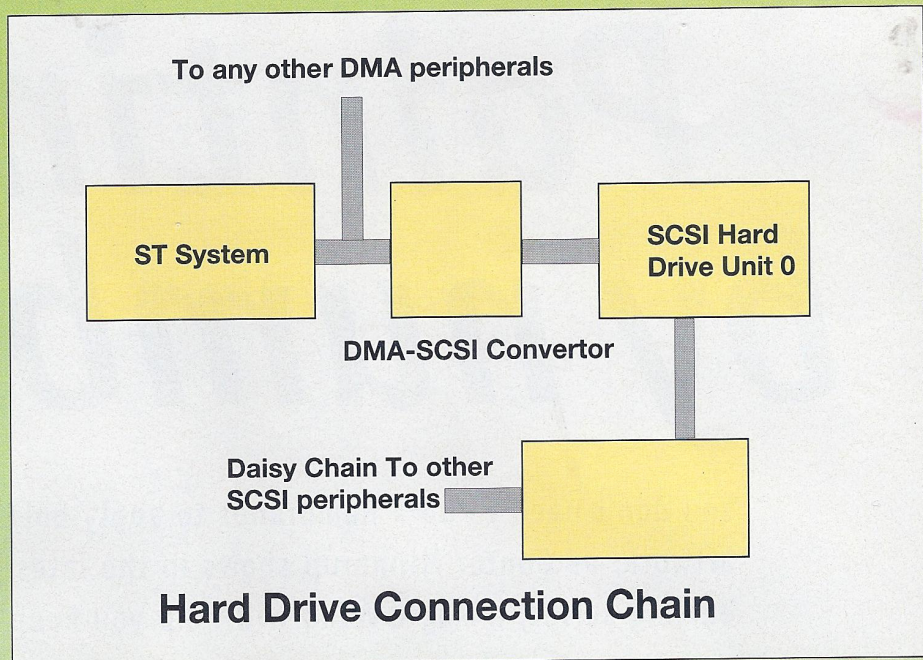
Fragmentation

Hard drives hold data in small sectors and each sector is used on an all or nothing basis, as files are stored on the disk they are allocated to a series of empty contiguous sectors, this allows optimum access to the files and the disk behaves well. As time progresses and files are deleted and added gaps are left in the drives sector map and other files are slotted into the gaps; if the gap is not big enough for the file then the file ends up scattered or fragmented all over the drive.

To read the file the drive heads have to hunt all over the disk which increases the time to access the file tremendously. This process keeps building up and becomes worse with time, the slowdown happens so gradually that the user doesn't realise what has happened until the system slows down significantly. Fortunately the solution is a simple one - use a defragmenting program regularly, such as the excellent Diamond Edge, to shuffle the data on the disk into contiguous sectors and thus restore the drive to its previous best. Depending on usage a typical drive should be checked for fragmentation at least once a month.

Formatting

A new disk whether a floppy or a hard drive has no data on it at all. To allow the computer to know where to store data and to provide markers so that the data can be retrieved and verified that it is intact the surface of the drive has to be formatted. This process is controlled by the processor but implemented by the controller and consists of writing special strings of data over the entire surface of the disk. Once



The hard disk connection chain

these markings are in place the directory structure is written at the start of the disk and any bootsectors written the disk is then ready for use.

Auto Booting

Autobooting can cause considerable confusion amongst hard drive owners but the concept is really quite simple. The operating system in most computers has to be loaded in from a disk and a small loader program is put in a special defined place on the disk which is the first thing looked for. Once loaded this boot routine then loads in the remainder of the operating system.

The ST is different in that most of the operating system is built in to the machine, but it still looks for a boot strap routine to either load in an alternative operating system, any system extensions or similar programs such as hard disk handlers before the operating system starts up. To set up a hard disk as autobooting the hard drive should have a small program which writes to the hard drives boot sector and puts a small piece of code there to enable autobooting. The ST looks at the floppy first so make sure that no floppies are in the drive if trying to autoboot from a hard drive.



High density drives

In order to use high density drives with their increase in data storage two things need to be changed in an ST, firstly a high density drive mechanism is required and secondly the clock rate to the floppy controller chip must be doubled from 8MHz to 16MHz.

Early WD1772 chips will not handle this increase in clock speed but later versions (usually labeled as 02-02) can usually work at 16MHz though not always totally reliably. The only guaranteed solution is to exchange the controller for an Ajax chip.

The commercial modules take the idea a little further and sense when a high density disk is being used (it has an extra hole opposite from the write protect hole) and switch the clock speed accordingly, this allows the use of mixed media and also external drives as well. If this modification is being fitted insist on a module that has its own 16MHz oscillator on board, some cheaper modules take a 16MHz feed from the main board which is not a very satisfactory solution.

The TT and Mega STe have a DIP switch inside which allows high density drives to be used automatically, switch position seven enables or disables this feature, most machines will work with a 1772 but in case of problems be prepared to swap it for an Ajax.

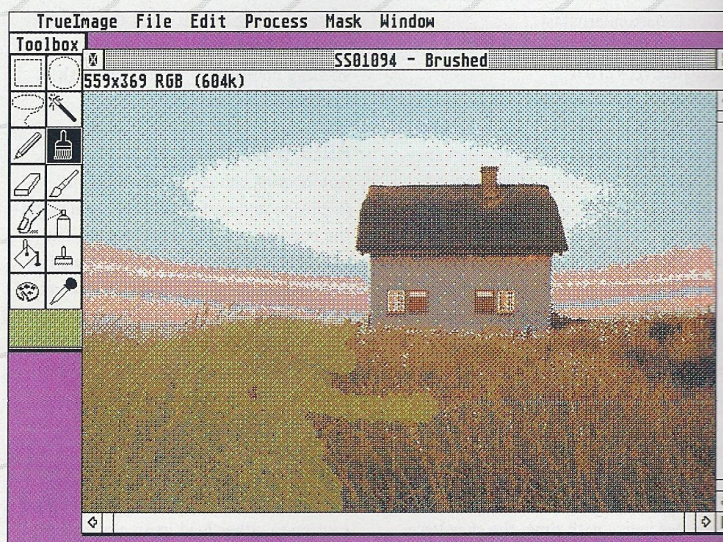
Painting by numbers

You don't need to be a Rembrandt to apply bold brushstrokes to your artwork; as Gunter Minnerup shows in the latest instalment of his image editing series, a Magic Wand will help you keep the paint in its place.

One reason for the popularity of image processing software is almost certainly the fact that it does not take a great deal of skill to achieve fairly dramatic effects by using their global, automatic or semi-automatic features such as the filters, the histogram functions and the adjustments of brightness and contrast values.

Even the definition of masks to constrain the effects of these operations to certain parts of a picture only is not exactly a demanding business, especially not if you take advantage of the software's ability to save and load bitmap masks. It is said that many word processors are used as glorified typewriters, with many users never learning to come to grips with their most sophisticated features, and it is a fair bet to assume that much the same goes for image processing: improving the sharpness and brightness of scanned images, cutting out unwanted background and applying the more striking process filters boldly is probably the limit beyond which many owners of such packages never venture.

The painting and drawing tools, in particular, tend to be grossly underused, probably because most of us do not think that we have the required artistic skills to deploy such creative tools effectively and with confidence. As someone for whom the combination of a blank canvas and a paintbrush means utter panic and helplessness, I have plenty of sympathy with that view. However, although it is quite possible to use an image processing package to create your own neo-impressionist masterpiece without recourse to any scanned images, they were hardly intended for that. In fact, creative freehand skills are not required at all to



The same "painting by number" principle applied to a truecolour scan: a straightforward method of reducing photographic complexity to the simplicity of a bright, colourful picture that looks hand-drawn.

transform scanned photographic images into striking artwork by the liberal use of painting and drawing tools.

Bold brushstrokes

For the average Atari owner, this is arguably an even more important application of image processing software than the fine tuning of the purely photographic elements of your illustrations. After all, unless you have a high-quality display and intend to output your work to a high-resolution printer, there are strict limits to what you can do to alter and improve a scanned image.

Even the comparatively coarse images displayed on low-res monitors and rendered on dot-matrix or laser printers, however, can provide the basis for impressive artwork when you consciously

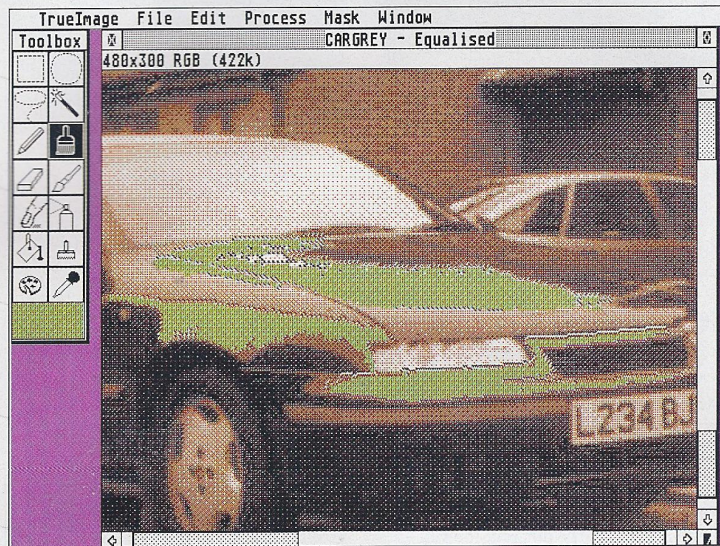
discard the subtle greyscale and colour data which exceed the capabilities of your hardware anyway and replace them with bold brushstrokes to give them a cartoon-like quality.

The key to painless accuracy with the paintbrushes is to use them in conjunction with the selection tools. The Magic Wand tool, as found in just about all self-respecting image editing packages, is the most useful by far, as it allows you to pick out a particular tonal value and automatically select everything in the picture (or within an area defined by a previous selection) with that value.

You can gradually add further areas until you have selected everything you need. The paintbrush will then only affect the selected area, with the rest of the picture under a protective mask – or you



Picking out fine detail with the Magic Wand will automatically mask off the surrounding area and afford reliable protection against a slip of the paintbrush!



The same "painting by number" principle applied to a truecolour scan: a straightforward method of reducing photographic complexity to the simplicity of a bright, colourful picture that looks hand-drawn.

can invert the mask and apply the eraser to the rest to "cut out" the object of your interest. The top-end packages, such as DA's Repro, will take this one step further and allow you to limit the effect of the paintbrush to selected colour ranges only, but fiddly as it is, ordinary Magic Wand masking is quite sufficient for most jobs.

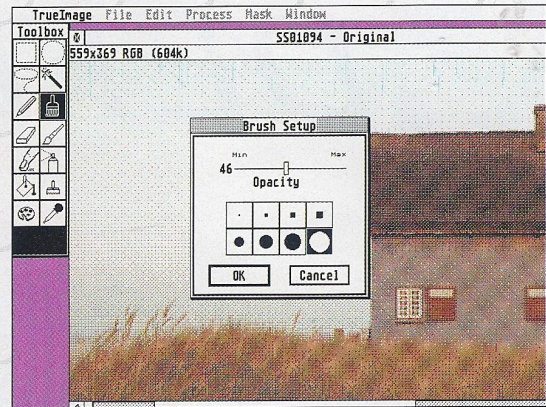
As anybody who has ever used a piece of charcoal will know, the pressure with which the strokes are applied makes a big difference. Even the most basic image editor will allow you to simulate this effect by regulating the degree of opacity and the dispersal of the pixels applied, and some offer a "fade out" effect on top of that. Indeed, some "painting" tools do not add any colour of their own but merely soften the transition between already existing colours (or grey tones), or "smudge" the colour as if touched by a wet

finger or sponge. These effects must be applied very sparingly, but are indispensable for eliminating small blemishes in a less-than-perfect scan.

Clone

A special mention must go to a tool variously called "Stamp" or "Clone". With this tool, you paint one area of a picture over another, or one picture over another. One solitary figure in a landscape can quickly be duplicated into an entire football crowd, or two different pictures subtly merged into one. This is much easier to do than it is to describe, and it's a collage artist's dream.

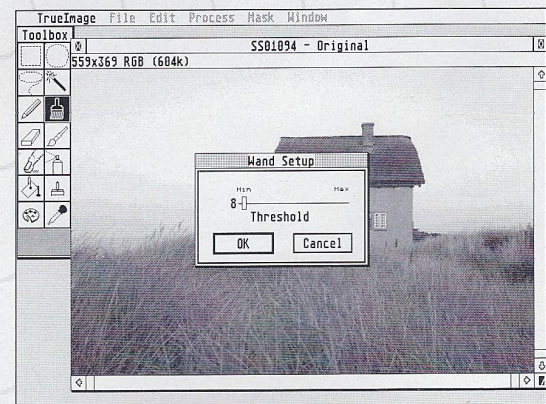
As with all image processing, practice makes perfect: don't worry about irretrievably spoiling your picture as the Undo function will enable you to return to its previous incarnation at any time. This,



TrueImage's simple "Opacity" slider controls the extent to which the background will shine through the newly applied colour. At the maximum setting, coverage will be complete.



And then there were two: the "Stamp" tool has effortlessly - and seamlessly - added a "clone" to the lonely seaside cottage.



The most important aspect of using the Magic Wand is to get the threshold setting right: too small a value and you will have to add further areas, too large and half the picture will be selected.

incidentally, is why image processing software seems so profligate with precious memory: it needs to hold at least two versions of each picture in RAM to guard against such mistakes, so that editing a largish full-colour scan will quickly push your average ST to its very limits.

Next month, we'll apply everything learned so far in our first really ambitious project: a picture collage with a Daliesque, dream-like quality...

DEFENDER 2000



Save the humans! Defender 2000 has arrived on the Jaguar and it's blasting time for Iain Laskey.

Once again, Jeff Minter has woven his magic to create an updated and enhanced version of the timeless arcade game Defender. There are three versions to play, Classic, Plus and 2000.

For those who aren't old enough to remember the original, Defender has you controlling a ship that flies over a scrolling landscape protecting humans from invading nasties. There are several kinds of enemies. The main ones are landers

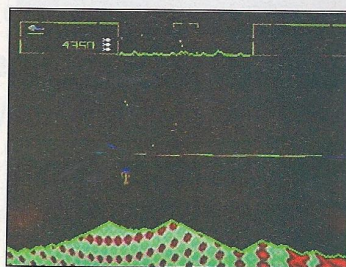


Take a classic concept, add a few bells and whistles, stir liberally and hey presto – Defender 2000!

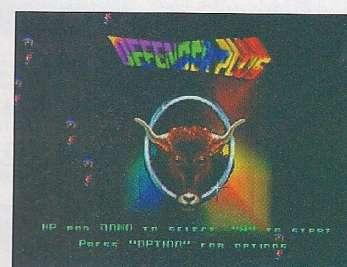
that steal humans and use them to turn into mutants which are faster deadlier versions of landers. Other targets includes ones that break into swarms when blasted. These are small, fast and very hard to shoot.

You can either be shot or collide with trails left by certain invaders. Each level has a fixed number of enemies and when they've all been destroyed you get a bonus for your remaining humans. Your basic weapons are a laser and smart-bombs that destroy everything currently on screen. You get an extra life and smart-bomb every 10,000 points. If all the humans are lost then the planet explodes. It's then wall to wall mayhem as you get attacked from all sides and the action is fast and exciting.

On later levels the adrenaline really starts pumping. In my opinion, Defender is probably one of the finest games ever designed. Atari brought in the original designer and coder of the arcade version,



Defender Plus sits awkwardly between Traditional and 2000.



Break out the sunglasses – the psychedelic effects are out in force again!

Eugene Jarvis, for final approval and he was very happy with the conversion.

Near as dammit

Starting with the Classic version, this is a near as dammit perfect copy. The sounds effects are sampled straight from the original game. The game plays and feels just like the arcade version in almost all respects. I couldn't find a real arcade machine to check but the end of wave graphics seem a little different though.

The Plus version adds updated graphics with detailed, shaded sprites. The ground features some psychedelic swirling colours that only Mr Minter could provide. Finally, there are some power-ups to enhance your weaponry. This too is very playable.

Last, and unfortunately least, comes the 2000 mode. Whereas Tempest 2000 was a superb variation, Defender 2000 sadly doesn't cut it. The graphics are just far too fast. The background is completely different and it's quite hard to keep track of where you are and what's going on. The scrolling is rough and leaps along in quite

large jumps. There are some nice bonus items to collect to help make your ship a bit more powerful though. Despite many attempts at playing this version, I found it more a case of luck that skill when achieving a high score.

Each flavour of Defender has its own high score. The high score letters have those Minter sparkling trails as you add your name. There are some nicely drawn static screens too. Another plus is some excellent techno music that's even better than that in Tempest 2000. Crank up that volume and enjoy!

Defender 2000 has a lot to live up to after Tempest 2000. If you want an almost perfect copy of original Defender then this game is a must. The Plus version is a bonus and in some ways can be more fun to play. However, the star of the show, Defender 2000 is really just a case of 'nice try'.

The bottom line for me though is that when I send this review card back to Atari, I'm going to go straight down the shops to buy my own copy, just for playing Classic Defender.

DEFENDER 2000

Publisher: Atari

Contact: 01753 533344

Price: £49.99

Pros: Classic version • good sound effects • nice music.

Cons: 2000 mode too hard.

SCORE: 7

Fit to Print

John Hetherington
looks at the thorny subject of printing.

Probably the most oft-used application on an Atari ST computer is a word processor. Not far behind comes graphics and desktop publishing. The common link in these and many more applications is the need to print. Hence a printer comes high on the list of add-ons for any ST owner.

Whether you are about to buy a new (to you) printer as either your first printer or to upgrade your ageing model, this month's ST Source is for you. And if you already own one, well, this month we bring you all the necessary details to understand and get the best from your printer.

Get connected

It is very easy to hook up almost any printer to your ST. On the back of your computer is an 'industry standard' parallel port labelled "printer". It is a 25 pin

female connector into which plugs an 'industry standard' 25 pin male connector. 'Industry standard' means the cable and connector used by most common personal computers. Beware of printers for Apple Macintosh computers as they are normally quite different with a connector specific to the Mac.

Although most printers have a parallel interface a few old models used a serial or RS232 interface. These are quite rare and you are only likely to find these from a car boot sale or similar source. While these can also be connected to an ST they are probably best avoided as they are non standard and you will not find widespread software support.

Apart from printers made specifically for Apple Mac computers virtually any other printer designed to be used with a personal computer will work with your ST - with varying degrees of success.

Printer types

How well a particular printer is going to work on your Atari depends on many different factors. Since there have been literally thousands of different printers manufactured it is impossible to give a definitive guide. However if you take a little time to understand the different classes of printer and how they perform in different situations then you will find it quite easy to match your needs to a particular model.

There are two main ways of categorising printers, one by the technology used to apply ink to the paper, the second by the 'language' used to control the way the printer prints text and (sometimes) graphics. We will now look at these two in turn.

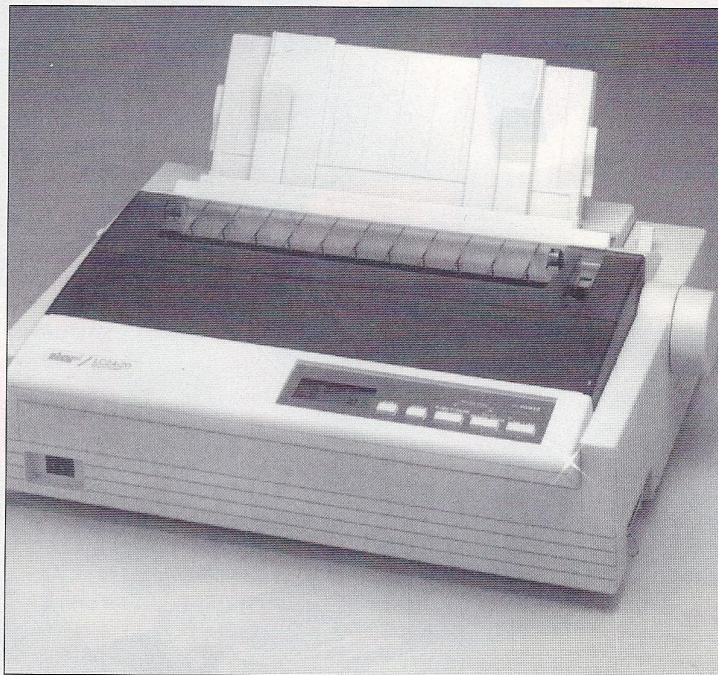
Ink onto paper - the modern options

Dot matrix

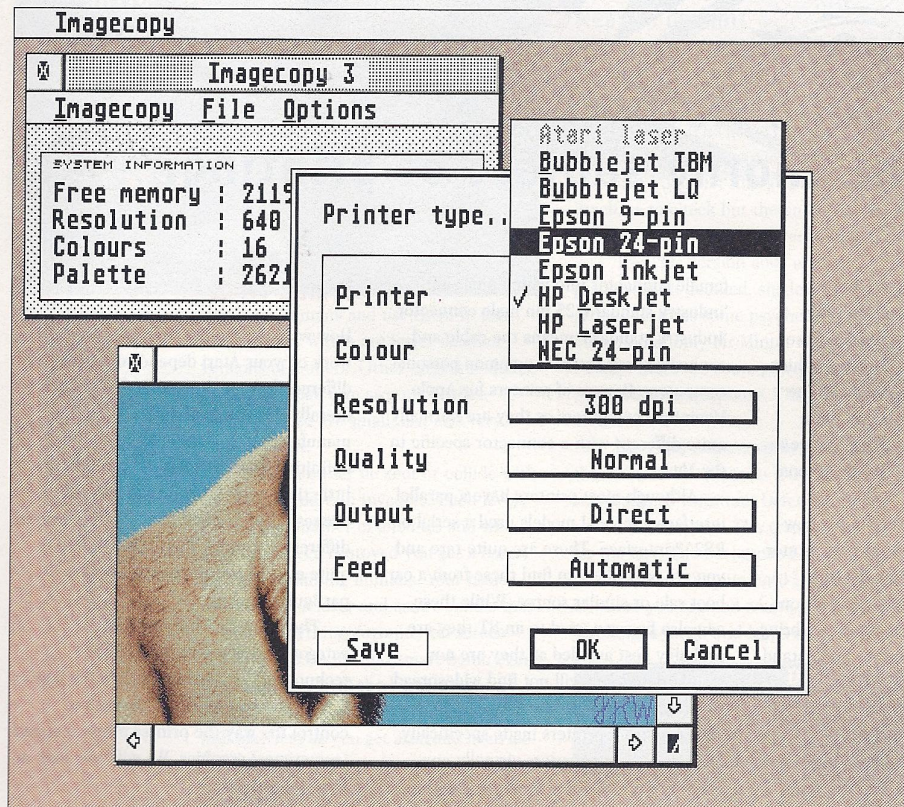
Up until about five years ago the dot matrix printer was by far the most common form of printer for personal computer owners. It works by having a print head with either 9 or 24 pins in a square matrix. These pins then 'hammer' into a ribbon applying pressure that produces an image on paper - much the same way as carbon paper duplicates the pressure of a pen.

While many major manufacturers produce dot matrix printers including Panasonic and Star, by far the biggest is and was Epson. Hence Epson printers define the 'standards' for dot matrix printing.

Even today dot matrix printers have a number of advantages - they are very cheap to run, with a good ribbon they produce standards more than acceptable for most home users and because they use a 'high impact' approach are the only modern technology suitable for multi-part stationery and hence are still popular with accounting applications where every piece of paper produced needs to be in triplicate.



The Star LC24-20 - A classic 24 pin printer from Star



Dot matrix printers are well supported on the ST.

Dot matrix printers have three serious limitations compared to other alternatives. Firstly they are noisy. Secondly although they can be quite quick when printing simple text they are horribly slow at printing graphics - 20 minutes for one page is not unheard of! Finally, even though the quality can be acceptable to some people, alternative technologies are considerably better.

Inkjet

Inkjet printing is in some ways similar to dot matrix printing. It uses a similar print head but rather than apply pressure to a ribbon it squirts ink through its nozzles onto the paper. Thus it is much quieter than a dot matrix printer but it can't be used for printing multi-part stationery.

While many companies now produce inkjet printers, the big two are Hewlett Packard (HP) and Canon. While Canon's approach is to treat the inkjet more like a grown up dot matrix printer, HP's approach is more of a down scaled laser printer.

MEMORY BONANZA

STe / Mega STe

1/2 meg
£7.50

2 meg
£42.50

4 meg
£82.50

STFM T.U.S.

Special limited production
offers from T.U.S / Marpet
Developments

2 meg
£52.50

4 meg
£92.50

STFM Marpet

XRAM deluxe

1/2 meg
£32.50

2 meg
£62.50

4 meg
£102.50

All kits are supplied with comprehensive fitting instructions, testing software and a FREE disk of useful PD/shareware utilities. FREE technical support is available as is a competitively priced fitting service. Prices shown include VAT at 17.5% and delivery.

I would like to order:

Title _____ Initials _____ Surname _____

Address _____

Postcode _____ Daytime Telephone No. _____

I enclose a cheque / Postal Order made payable to The Upgrade Shop for £ _____

or

Please debit my ACCESS / VISA / SWITCH / DELTA (please delete) card by £ _____

Card No. _____ Expiry date ____ / ____ SWITCH Issue No. _____

Signature _____ Date ____ / ____ / ____

SEE OUR OTHER ADVERT IN THIS ISSUE

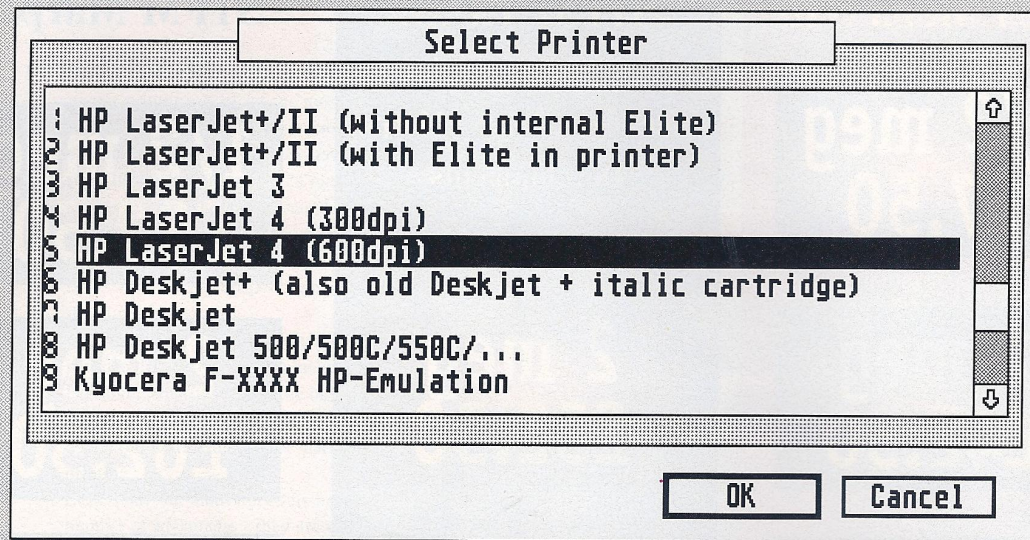


The Upgrade Shop



37 Crossall Street, Macclesfield, Cheshire SK11 6QK

INSTALL File Extras



Compo
Install @1991

That's Write 3 has support for 600 dpi HP lasers.

Laser

This is the third of the three major technologies, the most expensive to buy and run, and generally the superior in terms of quality and speed. While dot matrix and inkjet work on printing a line at a time a laser normally builds a page of text in memory and then dumps it onto paper. The process is based on applying a charge that attracts grains of toner to the paper then fusing the toner to the paper with heat. By working on a page by page basis a laser is faster (in most circumstances) than other technologies but it is more expensive to buy and run. Because a laser does not use an impact approach it can't be used to print on multi-part stationery.

Second hand pitfalls

Daisy wheel

Daisy wheel printers developed as an extension to old fashioned typewriters. They have a 'wheel' on which there is a character set. The wheel spins around so that the correct character is next to a 'hammer'. The hammer then strikes that character against a ribbon which then applies ink to the paper. The result is high quality text at unbelievably slow speed and with lots of noise. Believe it or not but these sold for upwards of £1,000 in the late seventies and early eighties before becoming totally obsolete by the mid eighties.

Most daisy wheel printers are compatible with a 'standard' known as Diablo 630. If you pick one up for your ST make sure it has this Diablo 630 compatibility - otherwise you stand very little chance of getting it to work. Similarly many daisy wheel printers have serial rather than parallel connections. If it is serial then it can be the devil's own job to get it connected to any computer as the cable connections are sometimes very peculiar in deed.

Obviously a daisy wheel printer will never print any graphics but if all you want is an occasional high quality letter printed,

albeit in a noisy fashion, then by all means pick one up second hand. Don't pay more than £20 for it though!

Thermal

There was a short fashion for thermal printers, particularly for the first generation colour printers. The technology is similar to a fax requiring 'special' paper. To be avoided at all costs!

'Quietwriter'

IBM pioneered this technology. It works similar to a daisy wheel but with the pressure applied to a special ribbon without high impact. It is more like painting ink onto the page. It's old technology with high consumable costs and should be avoided.

Others

Along the way you'll find examples of one or two other non standard approaches that have been tried. However if a daisy wheel printer does not fit - normal ST owners should avoid any alternatives to the main three current technologies - dot matrix, inkjet or laser. You have been warned!



Now your talking

Language - the modern options

(Virtually) all printers will print basic text on a page without any form of printer driver. (Virtually) all printers contain at least one font. Send the printer a simple set of ASCII characters and it will print them onto paper. We will come back to this in more detail later. However, anything more sophisticated than this simple method of printing text requires control codes to be sent to the printer. A control code will tell the printer to do something like "print this character in bold", to something more complex like "change the character set into Norwegian and then print a particular character from the Norwegian character set".

These control codes can be thought of very much like a language. They are the means by which software on the Atari communicates with the printer in order to achieve certain results on the page.

Epson Escape P

Most dot matrix printers use some version or derivative of Escape P - the system pioneered by Epson for controlling dot matrix printers but also used subsequently for some (Canon and derivatives) inkjet printers.

Escape P has evolved over time as Epson and others introduced more features into their printers. Hence Epson compatible - the term normally applied to Escape P compatibility - can mean many things. Often a printer may be explained as being compatible to a particular model Epson printer such as an Epson LQ850. This basically means that the printer will work when supplied with the same codes as an Epson LQ850.

However things are not quite that simple! An Epson LQ850 has, as part of its internals, a number of different fonts. Epson LQ850 may mean that a printer uses the same control codes as an LQ850 but that it has different fonts. Hence if you use software like Protext, Write On or That's Write that uses a printer's internal fonts, while printing in the basic fonts might work, printing in the special LQ850 fonts does not. Canon inkjet printers are often described as compatible with a particular Epson printer and this is normally the case for fonts as well however Star printers are normally only compatible with the control codes, having their own internal fonts that are rarely supported by Atari software.

Generally, any printer described as Epson compatible or compatible with a specific Epson printer will work well with most Atari software. However you may have some problems addressing specific features in the printer such as its own internal fonts.

Epson Escape P2

This is the new 'latest' standard from Epson for dot matrix printers. It allows support for amongst other things scaleable fonts within dot matrix printers. Escape P 2 printers are 'backwards compatible' with Escape P printers. That means that if your software does not support Escape P 2 printers specifically then using an older Epson driver will work - albeit not give you access to some of the printers more advanced functions.

Very little Atari software has full support for Escape P 2 printers - even so they do mark a good investment and you can use them quite adequately using an older Epson printer driver.

PCL

This is HP's standard for driving laser printers. HP use a very similar subset of the PCL system to control HP Deskjet printers (their popular inkjet printer). PCL has evolved, the latest being version 5. Most other laser printers will offer compatibility with some version of PCL. When buying second hand avoid any PCL 1 devices. This dates the printer as stone age in laser printer terms and is not well supported by software. Any higher revision of PCL than this and you should get good results with the printer attached to an Atari.

Similarly, if you have an HP Deskjet, then if no Deskjet specific driver is available then try using an HP Laserjet one as an alternative.

Postscript

Postscript is the most sophisticated way of controlling a printer and is only normally found within laser printers. It is also the standard used by photo typesetting machines - the devices used to produce films necessary for printing books and magazines. Postscript is normally used by people who eventually produce material for publishing via a photo typesetting machine. Only a serious DTP user would be able to justify a Postscript printer on an Atari computer.

The HP Laserjet 4 - a workhorse laser printer from HP featuring PCL5 & fast, high quality printing.



Diablo 630

This is the standard control mechanism for daisy wheel printers carried over into some other esoteric devices.

HPGL

HPGL is the standard means for controlling plotters. HPGL support is found in some Atari drawing software. Apart from plotters some other printers - normally laser printers - can accept data in the HPGL language.

Control codes to avoid

IBM Proprinter

This is a control system developed by IBM for its Proprinter series of dot matrix printers. While it is quite widely used it is rare to find support from newer Atari ST software. Printers that only support IBM Proprinter emulation are best avoided.

Canon

Canon printers support a range of different control code systems depending on the particular model. However Canon's own systems are not well supported by Atari software and best avoided. This applies particularly to the older Canon badged laser printers.

"Win" printers

Some printers do not have any control code systems inside them. This principal was pioneered by Atari with the SLM804 and SLM605. While these printers function well on the Atari - as they were designed to - other dumb printers do not. The latest batch of dumb printers are designed specifically to work only with Microsoft Windows and will not work with the Atari ST.

THE NEW 14,400 FAX AND DATA MODEM FROM TUS



Comes pre-supplied with 25 pin and 9 pin cable to work with any Atari.

Get Communicating
for just **£79** inc VAT

Our modems are fully tested with all Atari ST, TT & Falcon computers and come complete with all cables and software to get you connected.

To Order, call TUS on 01625 503448

TUS DEVELOPMENTS

37 Crossall Street, Macclesfield, Cheshire SK11 6QK



Trouble Shooting



Images can be printed in colour with the right software and printer.

So you now have your new (to you) printer. Let's look at how to get it installed, tested, and how to solve some common problems.

First try a self test

Virtually all printers have a self test option. This will be documented in the manual for your printer and usually involves holding down some combination of keys on the printers control panel at the same time as switching the printer on.

The self test will prove that the basic printing mechanism of your printer is working. It does not however guarantee that the printer itself is fully functional. There could be a fault in the interface circuitry ie the part of the printer that controls the interface between the printer and the computer. However it is normally a very good guide to the fact that the printer itself does function correctly.

Then print an ASCII file

An ASCII file is a simple file made up of unformatted text (ie basic text without special bold or underline type characteristics. Most word processing software including 1st Word will let you create an ASCII file. However even easier - most software comes with a README file or similar which describes the software and any revision notes. These README files are normal ASCII files in 99% of instances.

When you double click on an ASCII file from the ST's desktop you will get the message Show, Print or Cancel. If you select Show then you will see the text (in plain English) on your monitor. If you double click again but select print then the text should print out on your printer. At this stage it really is that simple - you do not need any special files or printer drivers to print an ASCII file.

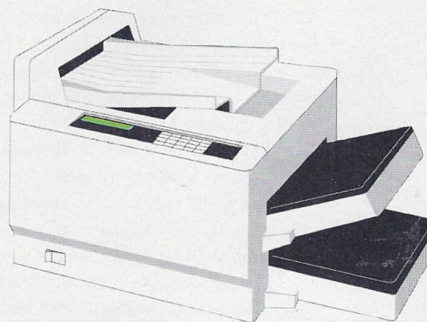
If this works OK then your only problems now are going to be

to convince your software to communicate correctly with your printer in order to get the results that you want. If printing an ASCII file does not work then something very basic is probably wrong.

First check the connections between your ST and printer. Particularly with some models of HP Deskjet it is quite difficult to connect the printer cable to the printer. The printer port is hidden underneath the printer and it takes some convoluted method of holding the printer in order to apply enough pressure to get the connector fully home.

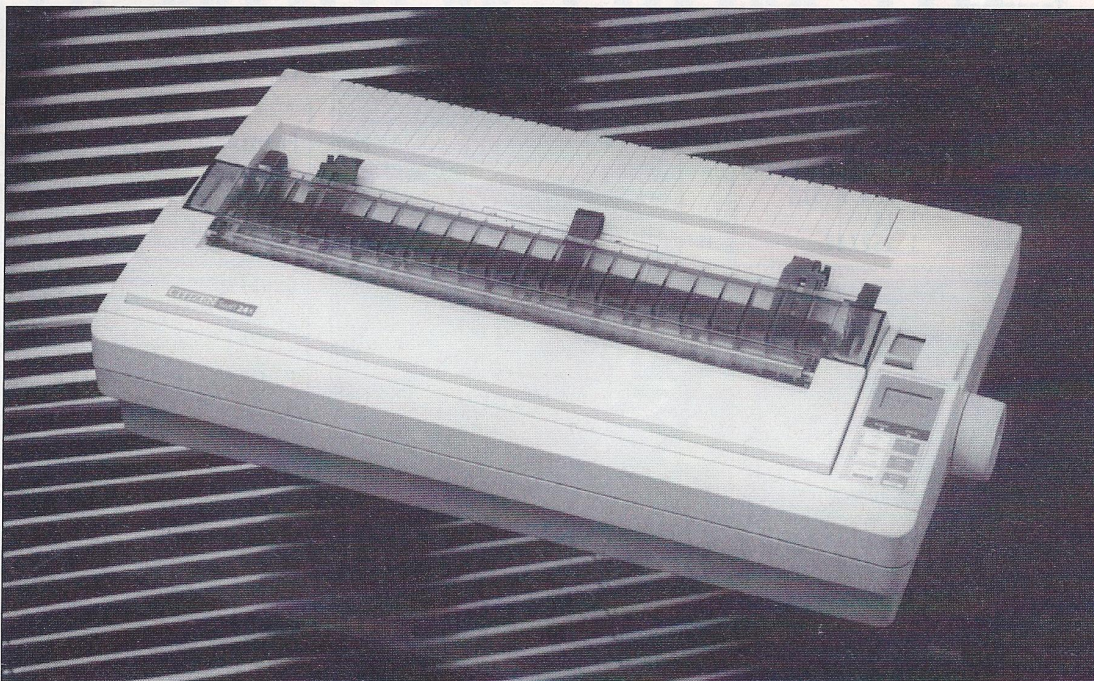
Next, make sure you switch the printer on before the computer - certain early models of Deskjet again require this in order to print.

Still not working? Is the printer printing garbage? If so then this normally means that one of the data lines is not sending/receiving data. Either the printer, the printer cable or the ST printer port is faulty. It's impossible to say which at this stage. Either try your ST with another printer or your printer with a friend's computer to try and eliminate the cause of the fault.



Help – I need a driver!

Citizen Swift 24 –
Like most dot matrix
printers, the Citizen
Swift will work with
most software using
an Epson LQ driver



The most common question asked by a new or prospective printer owner is “does it have a driver for my Atari?” Before looking at why this is completely the wrong question to ask in the first place let's first explore what is meant by ‘driver’.

You will have seen in the previous article that (virtually) any printer will print an ASCII file just by double clicking on it from the Atari desktop and selecting print. However all we are doing here is sending simple text to the printer and having it printed in a single font without any attributes such as bold or italic.

We also saw earlier how different printers speak different ‘languages’. In other words you have to send them different special sequences of codes to say switch bold text printing on and off. Well we might say you will have to send the codes, more normally you will tell your software that you want bold text - it's the printer driver that contains all the information about which codes to send.

Old fashioned Atari

Despite all its many benefits and glories the way the Atari handles printing is quite archaic. When Atari first produced TOS - the ST's operating system - they left printing capabilities out of it completely. The printing part was shipped later on disk and called GDOS.

GDOS in theory was to provide a standard means for all Atari software to print. All you needed to print from any piece of Software was a GDOS printer driver. This is much the same approach as used by PC computers running Microsoft Windows or Apple Mac computers.

This sounds fine in theory. However GDOS proved very limiting for many applications, used a lot of memory when memory was a very expensive commodity and hence it did not provide the ‘standard’ that the Atari really needed. Hence every software program that was not written to use GDOS needed to have its own printing system and hence its own printer drivers.

After GDOS came SpeedoGDOS, a major improvement on the

original, in particular the addition of scaleable fonts, but now also requiring even more memory and a hard disk too. For ever the Atari owner is consigned to printer drivers specific to the software that they are running.

Don't Panic

Having said that, Atari software that does not use GDOS rarely needs a driver specific to your particular printer. Most printers are compatible with a very few ‘standards’ for printers we discussed earlier in this feature. Even if you have a brand new model HP Deskjet it will normally work with a driver that was constructed for the original model Deskjet. Getting your printer to work with a piece of software should normally be quite easy.

Getting the software to use all the features of your printer is much less likely. While current model Deskjets may have resolutions greater than 300 dpi, have lots of built in fonts – even scalable ones – and clever data compression techniques to speed up graphics printing, these features may prove to be very elusive to the average ST user.

Can I write my own driver?

This really depends on three things – your ability to understand printer escape codes, the completeness of the printer manual in letting you know the information you need in a fashion you can understand and the software you want a driver for.

For example – modifying a 1st Word Plus driver is within the grasp of an enthusiastic Atari owner. Producing a GDOS or That's Write driver is best left alone by all but the more advanced programmer.

Whatever, before you embark on writing your own driver check out the manufacturer of your software and the PD libraries. You never know – someone may have already done the work for you.

THE UPGRADE SHOP

TEL 01625 503448

All prices include VAT @ 17.5% but exclude delivery. Orders can be placed by telephone quoting credit card details or by mail order. Please make cheques and postal orders payable to "THE UPGRADE SHOP." 1 year warranty on all products unless stated.

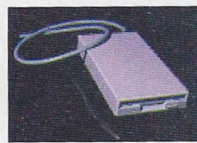
HARD DRIVES

Series 100c hard drives from T.U.S Developments. Superb metal case (vertical or horizontal mounting), very quiet cooling fan, internal power supply, device selector, dual SCSI parts and interface for ST or Falcon. All systems are supplied fully set up with all cables and accessories - Just plug in and go

NEW LOW PRICES

422 Mb system for the ST series	£269.00
120 Mb system for the ST series	£199.00
105 Mb system for the ST series	£189.00
For other sizes please call!	

HIGH DENSITY EXTERNAL DRIVES



Quality 'metal-cased' external Disk Drive with power supply
High Density drives read/write to both normal DSDD and DSHD disks with fully automatic switching.

High Density (2Mb) Drive with controller	£79.99
High density (2Mb) Drive, no controller	£59.99
Double Density (1Mb)	£59.99

MEMORY UPGRADES

BONANZA PRICES

PLEASE SEE SEPARATE ADVERT
FOR OUR BEST PRICES EVER!

MONITORS

All monitors include a Tilt and Swivel stand	
TUS 14" Mono monitor for ST series without sound	£89.00
TUS 14" Mono monitor for ST series with sound	£99.00
TUS 14" colour for Falcon (0.28dp SVGA)	£229.00

TOS 2.06 SPECIAL

TOS 2.06 kits come with full fitting instructions and TOS manual. Both kits allow manual switching between your old and new TOS for full compatibility.

STE SWITCHER

Version 2. Simple solderless installation £47.99

STF/STFM SWITCHER

Version 2. DIY installation £57.99

INTERNAL HIGH DENSITY DISK DRIVE

High density controller module
with full instructions £25.00

High density controller
and 2Mb disc drive £58.00

SPECIALS

STF/STFM Tos 2.06 + HD Module + 2Mb Drive £109.00

STE Tos 2.06 + HD Module + 2Mb Drive £99.00

MODEM

T.U.S. 14400 FAX MODEM £79.00

PLEASE RING FOR FURTHER DETAILS

PARTS

NEW PLUG IN POWER SUPPLY

Includes power socket, switch and pedestal -
no soldering £32.99

INTERNAL REPLACEMENT DRIVE KIT

1 or 2Mb Drive supplied £39.99

KEYBOARD £49.99

MOTHERBOARDS (Call for availability)

290 DPI replacement mouse £9.99

REPAIRS AND FITTINGS

Fully trained engineers for a reliable repair. All jobs quoted for individually (no fixed prices). 48 hour turnaround on most machines. Long 4 months warranty as standard.

We can fit any of the advertised products to your machine for a one off fitting charge of £15.00. This means that if you require say an upgrade and over-scan fitted then the charge is only £15.00

Please ring for an appointment before bringing your machine or call if courier collection is required. Please ensure all parcels collected are adequately packaged.

FITTING SERVICE AVAILABLE
ON ALL UPGRADES FOR £15.00

DELIVERY: Small items under £60.00 please add £3 p&p. Large items and orders over £60 add £7 courier charge. Courier pickup for Upgrades and Repairs £7.
Monday-Friday 9am-5pm.

Technical Support: Tues, Wed, Thurs 6.30pm-8pm

Same day service available for upgrades and most repairs. Please ring before you bring.



The Upgrade Shop

37 Crossall Street, Macclesfield, Cheshire SK11 6QK

Common Problems

Nothing prints and either the computer locks up with a busy bee mouse pointer or after a while I get message output device not responding or similar.

The ST is trying to send data but the printer does not want to receive anything. Check to see that the printer is 'online'. Most printers have two modes - online being ready to accept data from a computer and offline where other keys can be pressed on the printer to perform certain functions such as load a sheet of paper or change the default font for printing.

Nothing prints - I get no error message and the mouse pointer reappears.

The Atari thinks it has sent all the data to the printer - but the printer does not think it has been sent anything. Again this could be either a fault with the ST or more likely the printer itself. It is unlikely to be a faulty cable.

The printer seems to be printing but either the text is very feint or the paper is blank.

Either you are out of ink or the ink cartridge/ribbon is not inserted correctly.

Between each line of text I get a blank line.

This is normally caused by a dip switch being set incorrectly. When the ASCII character set was defined two special codes were developed for controlling printers. Carriage return (CR) sends the carriage of the printer - the part that holds the print head of a dot matrix printer to the beginning of the line. Line feed (LF) causes the printer to advance the paper one line of standard text. However some software programs assume that when you send a CR to the printer the printer also automatically does a line feed too. Hence there is a switch on the printer to say whether when it receives a CR it also automatically advances a line as well. This is normally described in a printer's documentation as something equally obtuse like CR=CR+LF; ie when you get a CR character also automatically issue a LF.

Most Atari software sends both a CR and LF at the end of each line. If you have CR+LF set to ON then both the printer and the software are generating a line feed - you get two line feeds and hence double line spacing.

The printer feeds a blank page between each printed page.

This is a common problem when you have a cut sheet feeder as part of your printer. A cut sheet feeder is a device that allows you

Desk		File		Image		Print	
Passes				Shingle			
1	2	3	0	2	3	4	8
Printer density							
7) 240 DPI *							☒
WRITE ADJACENT DOTS							
Dot pattern							
HALFTONE 4X4							☒
PATTERN ROTATE							
Aspect							
UPRIGHT							☒
MIRROR							
??? HELP ???							
Ink colors							
4 COLOR							☒
Color O/P mode							
FULL COLOR							☒
K	C	M	Y				
UC REMOVAL							
TRACTOR							
Dumps across							
1	2	3	4	5	6	7	8
Sample mode							
A.A 3x3							☒
RESERVED							

The best way to drive your printer is with a dedicated standalone driver like Flexidump.

to stack multiple pages of paper – usually A4 – in your printer and automatically feed each sheet through.

What happens is that the printer has a concept of how long each sheet of paper is. This is set either by a dip switch on your printer or by a mechanical detector which detects the end of the paper. When the printer thinks it has reached the end of the page it automatically ejects the page and loads a new one.

However your software may well have a different idea as to how long the page really is! Even though you might not actually be printing to the full length of the page setting in your software – typically because it is taken up by a bottom margin or empty page footer the software still tries to space down to what it thinks is the end of the page – then tells the printer to eject that page and load a new sheet.

Hence when the software thinks the paper is longer than the printer does you end up with a blank sheet between individual pages. Either reduce the page size definition in you software or increase it in the printer (usually by dip switches again) and the problem should go away.

Incorrect positioning of print using continuous paper.

If you are printing on continuous paper, ie paper that is on one long roll typically with perforations to allow you to split it into single sheets, and find that the print is appearing at a different place at the top of the sheet then your problem is similar to the one above.

Your software and your printer think that the length of each individual sheet is different and the two settings need to be brought into step. Beware – some printers can only be set to use either 11 inch or 12 inch paper so you can have trouble with A4 length perforated stationary unless your software is particularly clever.

Skip perforations.

Another problem can be caused by printers being 'too clever'. Some dot matrix printers have a switch setting described as something like 'skip perforations'. This means that the printer advances the paper between pages so as the printer does not print on the perforation line between pages. In other words – when you come to tear your sheets of paper the printer attempts to leave a blank space around the tear marks so that you do not get half of a line on one sheet of paper – the other half on the following sheet. With modern software this option should normally be set as off – the software should make sure that this does not happen. However if you have it set on then when the software is trying to print close to the bottom edge of the paper the printer can automatically feed the paper causing text to be printed at the top of the following page.

Text prints but I can't print pictures.

This can be caused by a number of factors. If the software you are running starts to run out of memory it might 'decide' not to print pictures rather than crash or tell you it is having problems. Timeworks Publisher is a good example of this. Otherwise some software allows you to turn picture printing on and off – printing without pictures may make printing to proof text much faster. Check that your software has not got picture printing switched off.

I can't print downloaded fonts.

Virtually all printers allow a font to be downloaded into memory for fast printing. A few Atari programs use this printer downloaded font capability of the printer. However to download a font takes up valuable memory inside the printer – memory that could be being

used for a print buffer perhaps. Some printers have a dip switch setting to allow you to allocate printer memory for use with either download fonts or to use as a print buffer. Obviously you need to have the memory allocated to graphics printing.

My laser printer does not print a complete page.

If you have a laser printer then you could be running out of memory inside the printer. At 300 dpi you need at least 1Mb of RAM. At higher resolutions then you need correspondingly more memory.

When I try and print a £ (pound) sign on my printer I get a # sign.

The pound sign is a UK phenomenon. A printer may contain a number of language variants, eg US, UK, Norwegian etc. The printer usual has dip switches to say which character set to use. In the English character set the £ symbol is set to be at character position ASCII 156. In the US and many other non English character sets the # sign is at ASCII 156.

To show how absurd a confusion this can cause, many Americans refer to the # sign as a pound sign!

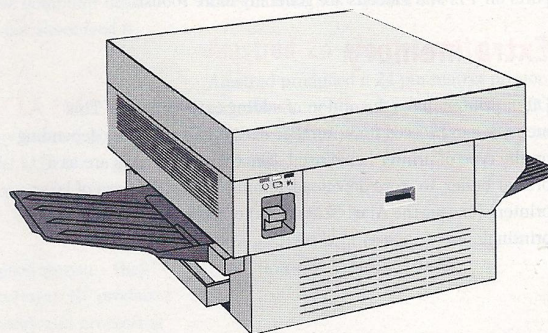
When I print an ASCII file with a £ sign in it the printer not only does not print the £ sign it also does not print the character after the pound sign.

Hence when the ASCII file says 'send in £12 registration fee' my printout says 'send in 2 registration fee' – what's wrong?

You have a Star LC10 printer which although it claims to be Epson compatible isn't fully so. No other printer we know of has this problem.

I have Write On – when I print a line of justified text in Pica the print is very slow and the print head seems to jump backwards and forwards word by word. What's wrong?

Same answer as above! Again you have a Star LC10. Don't use justified text with a printer internal font and Write On.



Essential Extras

Cut sheet feeder

Some printers are supplied as standard with limited paper handling options. Particularly dot matrix and early model Canon inkjet printers do not allow you to put a stack of A4 sheets of paper in them and the printer to automatically feed individual sheets through. If you are going to do any serious printing on individual A4 sheets then there is usually an optional extra cut sheet feeder for most printers that allows you to insert a stack of A4 paper and is well worth upgrading too. Most software will support printing on paper from an optional cut sheet feeder.

Printer Buffer

A printer buffer is a device that sits between your computer and printer. It allows the computer to send data faster than the printer can receive it. This has the major benefit that you can start using your ST again before your printer has finished printing.

When printing large documents in text mode from software such as 1st Word, Protext or Write On this can have a substantial impact. Printer buffers have much less impact on printing large documents graphics printing from programs such as Timeworks because the amount of data soon fills the memory of the buffer. Print single page documents to a dot matrix printer and obviously the benefit is more substantial.

Before investing in a printer buffer though it is worth checking out the options for upgrading your printers internal memory (see below).

T Switch

As die hard Atarians know, one ST is just not enough. If you live in a two or more ST household then sharing a printer between a number of computer users can get a bit tiresome if every time you want to print it means either moving data on a floppy disk or moving the printer between different computers.

The T switch device is one whereby you can share one or more printers between one or more computers. Early models were mechanical involving the physical movement of a switch. Latter day versions will switch automatically allowing any printer to print - the printer switch automatically connecting the computer that is trying to send data to the printer. Some T switches also incorporate a printer buffer as well.

However there is a word of caution about T switches. Some try and draw some power from the host computer. Some Atari ST and Mega STE's get quite upset and the sound chip will self destruct if this happens! Similar grief can occur if you try and use poor quality printer cable and/or too long printer cables. The printer ports on TTs and Falcons are generally more robust.

Extra memory

Often printers have the option of adding extra memory. This memory can be used for a number of different purposes depending on the type of printer being used. The three main uses are as a printer buffer, to store downloaded fonts and, in the case of laser printers (except the Atari SLM series) to assemble the page before printing.

Adding memory to use as a print buffer has all the benefits (and limitations) of an external print buffer but often with less cost and the option of also using the memory for other purposes. Inkjet printers in particular are well suited to this form of memory upgrade.

In principal it is possible to download a font from the computer into a printer's memory. This gives you all the speed benefits of using a printers standard internal fonts for fast printing with the additional benefit that you are not limited to the fonts originally supplied with your printer. While this sounds a very attractive option unfortunately very little software supports this kind of font downloading. Of the main Atari packages only That's Write uses it, and then very selectively on 24 pin matrix printers.

Finally, in the case of a laser printer the printer first builds up the image of a page in memory then prints it. Older laser printers came supplied with only 512K of memory - not enough for a page of A4 at 300 dpi. As the resolution of laser printers increases so they need more memory to assemble an individual page.

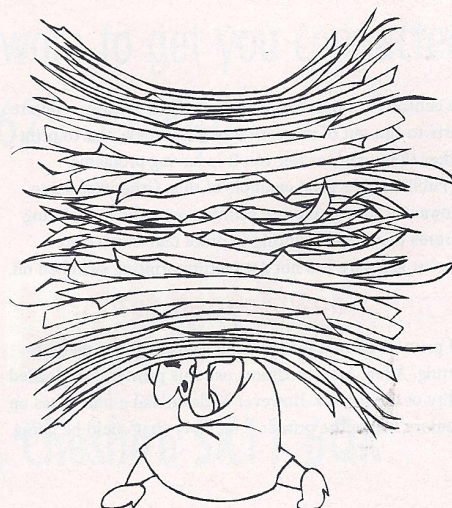
Font cartridges

Often a printer has the option of adding additional font cartridges. The benefits and pitfalls are much the same as with downloading fonts into memory described above. If your software has specific support for font cartridges available for your printer then it is well worth serious consideration - otherwise find something else to spend your money on!

Re-inking and refill kits

The cost of printer ribbons, ink cartridges and toner cartridges can be quite high - particularly when you are using the printer as part of a home computer setup. Re-inking ribbons and refilling ink cartridges can be a good way of saving substantial amounts of money.

Beware of using these products while your printer is in warranty as use of anything but the manufacturers own brand consumables can effect your warranty.



Choosing the right printer

Match budget to needs

At the beginning of this feature we discussed the various merits of dot matrix, inkjet and laser printers. As a guide a good new 24 pin matrix start at under £150 including VAT and carriage. An inkjet under £250 and a laser from around £500. Don't buy a new 9 pin matrix printer unless you find an exceptional clearance bargain - they are no longer much cheaper than a 24 pin and the quality of a 24 pin is far superior.

Evaluate your needs compared to the key benefits/features of the three key technologies we first highlighted at the beginning of this feature. If your budget stretches to a new printer then you are looking forward to a printer capable of printing excellent quality documents whichever the technology you are using. If needs must and it's second hand then try and buy a printer you know something about - either because it's mentioned here or you can see hooked up and working with an Atari ST - preferably in conjunction with the software you want to run.

Second hand?

Whether to buy new, second hand or keep saving depends on your budget and needs. Second hand printers are normally available either because the original owner is upgrading to a better specified device, they are clapped out or knocked off! Good bargains are available if you are working on a tight budget and want a dot matrix - many people have valid reasons to upgrade to an inkjet or laser.

Second hand inkjet printers tend to attract a relatively high second hand price and are less of a bargain. They are usually early models such as the Canon BJ10e (see later) or have been hammered (as was the one I sold!). You might be lucky with a second hand laser printer but the same generally applies as for inkjet printers. Laser printers they normally have a built in copy counter similar to a milometer in a car. Use this to check if the printer has been printing manuals five days a week or just used for the occasional letter. The copy count normally prints as part of the test page and is quite difficult to 'clock' compared to the milometer of a car. (Would you buy a second hand printer off this guy? - Ed).

Pay no more than around £20 for a 9 dot pin matrix, £50 for a good 24 pin and £100 for an inkjet. Laser printers are harder to price but unless the model is current - in which you should look to pay around half retail price (unless you know the owner) don't part with your cash at over £100.

What to buy?

The vast majority of the printers produced today are very compatible with the Atari and are of good quality - here we recommend a few from experience, and some to avoid!

HP Deskjet

Probably the standard for inkjet printers - you might not be able to access the full resolution and font handling of the latest model Deskjet printers but they are proven reliable and with good Atari software support.

Canon BJ series

Canon are the other major player in the inkjet market. About five years ago Canon produce the BJ10e printer designed for laptop users. Much to their surprise it sold not only to laptop owners but to a multitude of home users and office users who wanted a high quality affordable printer which took up a very small space on the computer desk. Canon BJ series printers are an excellent buy but check whether the cut sheet feed is standard or an optional extra when comparing prices.

Any Epson dot matrix printer with either an LQ or LX suffix.

The LQ suffix indicates 24 pin; LX 9 pin. As we said earlier - don't buy a new 9 pin printer except in exceptional circumstances. However a current model LQ100 is a good affordable workhorse 24-pin matrix printer with reliable software support.

HP Laserjet

Laserjets dominate the laser printer market and this is generally for good reason - they work and give few problems either with hardware or software. However even HP produced some turkeys - some of their early low cost laser printers lacked memory and processing

power.

Brother HL-660

Brother make an excellent HP compatible laser the HL-660 (not the HL-630...). If you are on a tight budget looking for loads of features then this is worth comparing to a similar specified HP model.

Atari SLM laser

This printer was made to print Calamus documents and Calamus was made for it. Press print from Calamus and watch your page emerge almost instantly compared to any other printer. However see below for the associated 'problems'.

And avoid...

HP Laserjet 1

This was the first laser that HP produced, is too old and came with too little memory as standard. HP have learnt a lot since this incredibly popular first effort.

Canon LBP series

Made by Canon as a 'competitor' to the HP Laserjet. At one time Canon produced all the laser engines for HP! This meant that the Canon lasers could not compete for the same market. Canon achieved this by producing a laser with a non standard software interface. Poorly supported by Atari software.

Canon BJ10e

Canon's first high volume inkjet. Every model produced after this starting with the BJ10ex, had Epson compatibility built in and hence widespread software support. The BJ10e did not and you could have problems with software drivers.

Star LC10

See our article on troubleshooting in this feature!

HP Deskjet 540

This is one of HP's new generation printers without any dip switch or control panel buttons to fiddle with. Presumably to cut the cost of some models, HP have started to make some of their printers only configurable using software running under Microsoft Windows on a PC. Difficult for Atari ST owners to get the most out of.

Atari SLM

Unless you are running Calamus (see above) the SLM is old technology, prone to paper jams, difficult to maintain and the consumables are expensive.

Amstrad 24 pin dot matrix

Amstrad produced a 24 pin matrix printer which differs from virtually every other 24 pin dot matrix. It prints at a maximum resolution of 180 by 180 dpi as opposed to 180 by 360. Avoid it at all costs!

HP Paintjet

Another (old) printer with a completely non standard resolution - to be avoided.

SUBSCRIBE To

Subscribe NOW for a FREE HiSoft Basic Compiler

The basic truth - Subscriptions add up!

Every month we produce the biggest Atari specific magazine in the world. Every month thousands of people receive it by mail because they subscribe. They are our most valued customers.

With issue 8 of Atari World every subscriber got a special bonus disk with their magazine - a free copy of the top selling HiSoft Basic 2 compiler. This came irrespective of if they subscribe with or without disk each month. In the years to come we expect to have more special subscriber bonuses.

If you don't subscribe yet don't worry - you can still get this special bonus. New subscribers who start either from Issue 9 or Issue 10 will also get a free copy of our HiSoft Basic 2 disk.

So, what have you got to lose? Whether you subscribe with or without disk then you save in more ways than one. No more scrabbling around in the newsagent trying to find Atari World amongst the Amiga games magazines for a start! What's more subscriptions are cheaper. If you subscribed from issue 1 with disk you would have saved nearly £18 compared with buying the disks and magazines up to issue 8 separately.

Oh, and if your not sure how long you plan to own your Atari then do not worry; at any time you can cancel your subscription and get a refund for the outstanding issues. Subscribe and take advantage of our Basic tutorials, subscribe and start saving now!

Save at least £14 per year when you subscribe with disk

BASIC Compiler Options

☒ Add line numbers ☒ Error messages ☒ No "FN"s in libraries ☐ Suppress default window ☒ Underlines in variables	☒ Break checks ☒ Overflow checks ☒ Pause checks ☐ Stack checks ☒ Variable checks
--	---

Array checks On Max Speed Safety

Output to ST RAM File name: _____

Pre-tokenised file: _____

Cancel
Advanced...
Debug...
OK
Compile

```

BASIC-2 File Edit Search Block Options Program Tools
E:\SOURCE\FORMWIND.BAS
Line: 3 Col: 1 Mem:48721
'constants for list objects
CONST H_UP=0,H_DOWN=1,H_DRAG=2,H_PAGE=3,H_BOX=4,H_MAX=5,H_COUNT=6,H_...
DECLARE SUB form_pos(x,y)
'DECLARE SUB StartWinMenu(BYVAL menuaddr,BYVAL title)
'DECLARE SUB TextRedraw
DECLARE SUB ProcessToolbars(BYVAL aes_win,BYVAL tool,BYVAL clicks,BYVAL ...
DECLARE SUB OpenTearMenuWin(BYVAL treeadd,BYVAL title,BYVAL closepm...
SUB AlignToolbarMenu
  SHARED woMenuTree&(1),woToolbarTree&(1),woBaseX(1),woBaseY(1),woI...
  SHARED woObjectTree&(1),woCancelObj(1),hgt_font_h,common1,commonhand...
  STATIC workx,worky,workw,offy,box
  offy=0
  junk=wind_get(commonhandle,WF_WORKXYWH,workx,worky,workw,junk)
  IF woType(common1) AND woTmenu THEN
    tree=woMenuTree&(common1)
    Setob_x 0,workx
    Setob_y 0,worky
    offy=hgt_font_h+3
  
```


ATARI World

The essential guide for all Atari computer users

The World's biggest English Language Atari Magazine - 100 packed pages every month.

Yes I want to subscribe to the worlds biggest Atari magazine - Atari World - how do I do it?

Where ever you are in the world you can subscribe to Atari World...You can pay quarterly, either by credit/debit card or by standing order. Each quarter we will automatically renew your subscription. Alternatively you can make an annual subscription by cheque or credit/debit card - and get 13 issues for the price of 12. The readers disk - you choose. Either buy it when something is interesting to you or get it along with your subscription each month.

As a subscriber you are an extremely valued customer. Occasionally we will have a bonus for subscribers like issue 8 - when you will automatically get the HiSoft Basic 2 compiler, whether or not you normally get the standard reader disks.

Scandinavian customers get an additional Swedish supplement free with each issue!

Readers of Atari World in Sweden, Denmark and Norway can subscribe via Sven Bornemark Musik. Payment should be made in Swedish, Norwegian or Danish Kronner via Post Giro.

	Sweden	Norway	Denmark	Finland
3 issues without disk	SEK140	NKK120	DKK110	FIM 85
3 issues with disk(s)	SEK190	NKK160	DKK140	FIM 110
13 issues without disk	SEK560	NKK480	DKK440	FIM 340
13 issues with disk(s)	SEK760	NKK640	DKK560	FIM 440

Scandinavian subscribers should pay the correct amount by Post Giro to the following accounts:

Sweden	23 59 59-4.	Norway	0806 1903977
Denmark	015-3087	Finland	800053-1092211

Sven Bornemark Musik, Lergosv 79, 238 40 OXIE. Tel: 040 54 54 54.

Fax: 040 611 17 69. Email: sven@dada.ct.se or 2:200/136.56

FidoNet.

Want to offer subs in your country? Talk to our publisher, Neal O'nions on 01487 773543.

SVEN BORNEMARK MUSIK

So what does it cost?

Payment either by credit card or standing order (UK quarterly subs only). Annual subscriptions can also be paid for by a cheque drawn on a UK bank or building society.

	UK	Scandinavia	EU	Rest of World
3 issues without disk	£9.50	See	£11.50	£14.50
3 issues with disk(s)	£14.00	Special	£16.00	£19.00
13 issues without disk	£38.00	Scandinavian	£46.00	£58.00
13 issues with disk(s)	£56.00	Prices Above	£64.00	£76.00

ATARI WORLD SUBSCRIPTION ORDER FORM

Yes I'm going to do it - I'm going to subscribe.

My name is:

Please send Atari World to me every month at the following address:

Telephone:

I want to subscribe ☐ Quarterly ☐ Annually

Reader Disk? ☐ Yes ☐ No

Either

Complete the following standing order mandate (option for UK subscribers only):

Please pay:

National Westminster Bank,
Huntingdon Branch
Sort Code 60-11-30

to the account of Specialist Magazines Limited

Account number 99651335

the amount of £9.50 (nine pounds 50p)/£14.00 (fourteen pounds)* including postage and packing.

Please make the first payment now and thereafter every three months, until you receive further notice from me/us in writing quoting the reference Atari World

and debit my/our account accordingly.

My Bank/Building Society account details are:

Bank Name _____

Account Name _____

Account Number _____

Sort Code _____

Branch Address _____

Signature(s) _____ Date _____

Or

complete your credit/debit card details here:



I authorise you to charge my credit/debit card for my subscription

Card number _____

Expiry date _____ If Switch, Issue number _____

Now unless you live in Scandinavia send this completed subscription form to:

Atari World Subscriptions
Specialist Magazines Ltd
Unit 3 Green Farm
Abbots Ripton
Huntingdon
Cambs PE17 2PF

You don't like filling in forms? Well if you want to subscribe by credit/debit card then just call our credit card hotline on 01487 773 543 (9.30 to 19.00, Mon - Fri)

Glossary

1st Word

The first 'serious' word processor for the Atari ST series. Supplied as standard with most Atari STs.

1st Word Plus

The updated version of the original 1st Word. Long in the tooth by today's standards but still extensively used.

Amstrad

Suppliers of the DMP series 24 pin matrix printers that print in a non standard resolution.

Apple Mac

A range of computers produced by Apple with a custom approach to connecting printers. Printers that are purchased for an ST will not normally work on a Mac and vice versa. As always there are some exceptions though.

Canon

One of the biggest manufacturers of Printers, both as there own brand and also other manufacturers own label products.

Centronics interface

See parallel interface.

Centronics connector

The type of connector normally found on the back of a parallel printer. It is a large 50 way D type connector.

Compression

Some printers have optional support for data compression when sending data between a computer and printer in order to speed up the printing of graphics. Occasional support is found for this with Atari ST software – but its rare. Printers that support compression will always (as far as we know) also support standard uncompressed data.

Control panel

Most printers – and certainly most printers you would want to use with an Atari ST have a control panel on the front. The control panel is normally a collection of buttons and LEDs that let you know the current status of your printer.

Cut sheet feeder

A paper handling device that allows a printer to be loaded with a number of pages of single sheet paper. In Europe this is typically a number of individual sheets of A4 paper.

Deskjet

A popular brand of inkjet printer manufactured by Hewlett Packard.

Dip switches

As well as a control panel most printers have dip switches. These are little switches, often 'hidden' inside the printer, that allow you to configure various print options.

DPI

Dots per inch. A measurement of a printers resolution. As a 'rough' guide the higher the DPI the higher the quality of print out, the more memory you will need in your Atari and the slower printing will be.

Epson

The World's leading manufacturer of dot matrix printers.

Epson compatibility

Normally signifies that a printer uses the same control codes as an Epson dot matrix and hence should work with a printer driver designed for use with an Epson printer. Not always reliable!

Escape (Esc)

A code sent from a computer to a printer that normally says the codes that follow are not to be printed – they are control codes designed to tell the printer to perform some other action.

Escape code

A code designed to control the printer rather than be printed eg to change font, start printing in graphics mode or start printing in bold.

Escape P

The name of the printer control language that is otherwise known as 'Epson compatible'.

Escape P2

A newer version of Escape P. Escape P2 provides amongst other things for matrix printers to have there own scaleable fonts and support compressed data.

Female connector

A type of connector allowing a cable to be plugged between a printer and a computer. A female connector has 'holes' into which a male connector with 'pins' is inserted.

Firmware

The instruction set of a printer or command set of a printer is usually stored in firmware; more accurately on a PROM or EPROM. This is a chip inside the printer that contains the printers control language. The chip is designed to be replaced by an end user if a manufacturer has a problem with the implementation of a particular feature of the interface or to support new enhancements or addons. Firmware upgrades were common in the early eighties but less so now.

Fonts

Immense subject. Simply put different styles/shapes of letters.

GDOS

An attempt at a standard system for Atari software to interface with printers and other output devices.

Hewlett Packard

Major manufacturer of Inkjet printer, Laser printers and Plotters. Also define the main standards for the interface of these type of devices.

HP

Short form of Hewlett Packard.

HPGL

HP's standard for plotter interface language

Industry standard

The term applied to indicate something is widely adopted and supported amongst all personal computers.

Interface

When used in terms of printers it can have two different meanings. One as the software control language for the printer and secondly for the physical hardware connector on the printer; normally either serial or parallel/Centronics.

LBP

Cannon's proprietary page description language.

Male connector

See female connector.

Memory

(Virtually) all printers contain memory. Memory is used to store information to be printed. Sometimes this can include fonts downloaded from the computer to the printer.

Multi part

Stationary that produces multiple copies from one print option. Similar to carbon paper principal and widely used in accounting software.

Online

In printing terms – Online means the Printer is ready to print as soon the computer starts sending it data.

Page description language

Used in Laser printers a Page description Language is a means of telling the laser printer how a page is made up. PCL and PostScript are the two common page description languages.

Papyrus

High powered word processing software for the Atari particularly suited to complex layout documents.

Parallel

The standard type of interface for printers allowing data to be transferred between the computer and printer at high speed.

PCL

HP's standard for Page Description language.

Postscript

The other major Page Description Language (alongside PCL). Postscript is used mostly for professional DTP output.

Printer buffer

Memory that is either in the computer, printer or between the two that allows data to be queued up – normally this enables work to start on the computer faster than if no buffer is available.

Proprinter

A brand of printer manufactured by IBM. Also an interface standard found inside IBM Proprinter models.

Protex

Word processing software for the Atari (also available for the Commodore Amiga and PC) that provides particularly good support for different printers. Ideal for large documents and fast printing, particularly on older printers.

RET

Resolution Enhancement Technology. RET is designed to improve the output quality of laser printers. It normally works by producing dots of a non standard size in order to produce smoother curves.

RS232

Old fashioned method of connecting a computer and printer. Uses the ST serial port and is quite slow.

Serial

See RS232.

SpeedoGDOS

Upgraded version of GDOS with support for scaleable fonts.

T Switch

Switch box to enable one or more computers to share one or more printers without the need to unplug cables..



The complete MAIL MERGE



The concept of mail merge is quite simple – you take data from a data file and ‘merge’ it with a document from a word processor to produce multiple copies of the same letter individually personalised for each recipient. Maurice Collins takes an in-depth look at the subject.



Making it easy to produce multiple letters quickly and easy is the essence of mail merge. Once you have your data set you will soon be using it again and again. If it's a list of your friends to ease the burden of writing Christmas cards, that list will soon be used to produce invitations to your summer barbecue, letting people know you've moved, announcing the birth of a new prog and so on and so on. It could be a list of members of your local club, a list of customers or a list of people who have previously donated to your favourite

charity. Whatever your hobby, interest or business, mail merge probably has an application for your – and your ST is an ideal tool to do it!

While it sounds simple, and it often is, producing your first mail merge can be quite daunting. Beyond that mail merge can be used for a wide variety of other applications. Producing mailing labels, printing lists of data from a database such as a catalogue of CDs or perhaps printing a membership list of all the names and addresses in a database. While a database may have its own print facility it is often not possible to get the layout as you want

it in the font that you want it – mail merge may well be your answer.

In this month's Atari Pro we will unravel the intricacies of mail merge, and show you how to apply the principles in practice to a number of popular word processors. We will also teach you some of the ‘tricks of the trade’ for getting your message across, getting your mail read and how to save time and money with mail merge.



Fit to merge

Before starting to mail merge with your word processor, you need a suitable data file of names and addresses. We explain how to get your data 'fit to merge'

Most word processing programs have a mail merge facility. This is usually based on a data file in a standard format. The format goes by number of different names but is most commonly called comma delimited or standard delimited file (SDF).

Before you can start mail merge it is important to understand the details of this quite simple file format. An SDF file is a simple ASCII file - one you can load and edit in any standard word processor or text editor.

Each line in an SDF file represents one 'record'. A record represents all the data for one part of a mail merge. So typically a record contains the name and address details of one person.

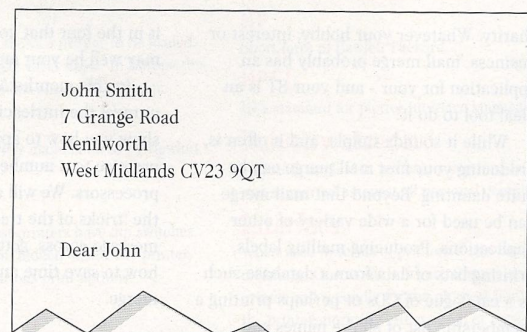
Each record is split into fields. A name and address file would typically have fields for a person's name, a number of fields for the various lines of the address and a further field for what is known in mail merge terms as 'salutation'.

Salutation is the way you wish to address the individual in the opening line of the letter. For example it might be Dear John, My Dearest John, Dear Mr Smith, Hi John or even Watcha-mate, depending on where you come from and how well you were brought up.

Each field is separated by a comma; hence a simple single record might be:

John Smith,7 Grange Road, Kenilworth,West Midlands,CV23 9QT,John

Here there are 6 fields. When we come to mail merge we would expect to produce a personalised mailing something like:



Now because we use a comma to separate fields there is a special case when we want to use a comma within a field. If our style was to punctuate an address in the form "7, Grange Road" instead of "7 Grange Road" we need a way of differentiating between a "," as part of a field and a comma that separates a field. To do this we embed the text of the field in double quotes. Hence our record would now look like this:

John Smith,"7, Grange Road", Kenilworth,West Midlands,CV23 9QT,John

Now when we mail merge, "7, Grange Road" is seen as one complete field, not two separate fields of "7" and "Grange Road". And our mail merge will now look like this:

While it is possible to type in data into a word processor in the

John Smith
7, Grange Road
Kenilworth
West Midlands CV23 9QT

Dear John

SDF file it is more normal to type the data into a database and then save the data in SDF format. When a database saves the data in *.SDF format it will normally put double quotes around every field in a record. Hence our record exported from a database would probably look something like this:

"John Smith", "7, Grange Road", "Kenilworth", "West Midlands", "CV23 9QT", "John"

Plan with care

With the salutation we saw the first need to plan your data entry carefully, depending on the results you want to achieve. If you plan to start all your letters Dear, ie Dear John, Dear Mr Smith, then the salutation need only contain the words to follow the word Dear. However as soon as we want to address one record differently - for example My Darling - then things get more complex.

Either the salutation field has to contain the full wording or, depending on the database you are using to enter data, two separate fields. One field for the 'introduction' such as Dear or My Darling, the second for the way you want to address them such as John or Mr Smith.

Note that even though you will probably have the person's name as the first line of their address it is very bad practice to use the name in the same format as the salutation. On the envelope your first line might be Mr J Smith. However after the word Dear in your letter you would not want Dear Mr J Smith. Typically it would either be Dear John or Dear Mr Smith.

The construction of names can get quite complicated. You might think for instance that if you were using a powerful word processor such as Protext, you could just build the salutation from the first and last words of the first address line. Hence taking Mr and Smith from Mr J Smith would save having to type a salutation. That works fine until The Right Honourable John Major slips onto your mailing list. A letter addressed to 'Dear The Major' just doesn't have quite the right ring to it!

Superbase Personal

Probably the most commonly used database on the Atari ST is Superbase Personal. It is one of the easiest database programs to use and is quite well suited to mail merge. It is however a database, not a name and address manager and so has certain limitations. These needed to be planned for when entering name and address data if your output results are going to look the best they possibly can.

The biggest problem with name and address data is that different addresses can have very different lengths. For example:

Fred Smith
Managing Director
Dial a TV Ltd
Unit 5, Launston Building
March
Huntingdon
Cambridgeshire
PE23 3RX

Harder SCSI Drives

If you are about to buy a hard drive – make sure you ask your supplier for:

- ★ 2 year warranty on parts and labour
- ★ high quality performance drives
- ★ new drive mechanism (no refurb drives disguised by new cases)
- ★ true SCSI chainable systems
- ★ a helpline with expert staff

MaxiS Singles

120Mb Quantum	£229.00
270Mb Quantum	£279.00
105Mb SyQuest	£369.00
270Mb SyQuest	£499.00

MaxiS Doubles

120Mb Quantum &	
105Mb SyQuest	£459.00
270Mb Quantum &	
270Mb SyQuest	£659.00

MiniS Drives

120Mb Quantum	£209.00
270Mb Quantum	£259.00
Add The Translator for STFM or	
STe computers for only £40.00	

Come to System Solutions for quality and service.

**UNIQUE
TWO-IN-ONE
SYSTEM**

Buy one drive now - add one drive later



To place your order, call 01753-832212

For all this and more, fill in this coupon, and get your own copy of the 52-page, Colour Spring Catalogue, ***ABSOLUTELY FREE***

Name:

Address:

Town: Postcode:

Send to System Solutions, 17-19 Blackwater Street, London SE22 8RS.

E&OE
AW Issue 1



MiniS



SCSI Hard Drive of the Year 1994

has eight lines to it whereas others have only three or four, as in:

John Major
10 Downing Street
London
SW1 1PM

As a guide - eight lines excluding the country is enough for most addresses. Anything less and you are likely to be restricted in the way you enter your data. When we enter our data into Superbase we may design a form something like this:

Figure 1

When we export our data with the above two examples (Figure 1) we then get an *.SDF file like this:

Fred Smith,Managing Director,Dial a TV Ltd, "Unit 5, Launston Building",March,Huntingdon,Cambridgeshire,PE23 3RX
John Major,10 Downing Street,London,,,,,SW1 1PM

Note how the blank entries in John Major's address are still in the SDF file as commas with no data in between.

Now when we do our mail merge we will get a printout for Fred Smith that looks fine. However the result for our letter to John Major is going to look like this with a horrible gap between London and the post code:

In some word processors it is possible to correct this in the mail merge with the word processor removing the blank lines within an address. However if your word processor will not do this then we need to change the way we enter data.

A much better way of entering addresses into Superbase would be a form like Figure 2. Now when we export the data the record in the *.SDF file for John Major would look like this:

,,,John Major,10 Downing Street,London,SW1 1PM

And when we mail merge the output will look like this:

All the space is now at the top and the address no longer looks like a badly done mail merge.

Figure 2

Exporting data

Virtually all database programs will export data in a range of different formats including SDF format. To export from Superbase you must first set Use Quotation Marks to on in the Options in the Set menu. Then you can use the export function to save the records that you want for your mail merge (Figure 3).

Figure 3

Superbase allows you a powerful system of filtering so that you can just mail merge selected records. For example you could filter all records in London or all year 7 students.

Typing straight in

If you have only a few records to enter you might want to enter your *.SDF file directly into your word processor. This is harder to do than you might think; one comma out of place and you get all sorts of problems.

The easiest way to enter data accurately is first to create a template for each line. Say you are going to enter six fields for each record. Your template should look like this:

Copy the template for the first few lines of your document. Now you can enter data into each field using the cursor keys to move between fields. You don't need to worry about entering the correct number of double quote and comma combinations - they are already there for you.

A 1st Merge

Now your data is in place, we take you through a simple mail merge with 1st Word Plus & 1st Mail

Now we have our data file the next stage is to undertake a simple merge of the data using a word processor. As our first example we will look at using 1st Word Plus for our mail merge. More accurately we will use 1st Mail; the mail merge program shipped with all copies of 1st Word Plus.

In this example we are going to assume that the mail merge you want to undertake is a standard letter to be sent to a number of different people – although mail merge can be used for many other different jobs too.

Mail merge requires you to have two different files. Firstly a data file that contains all the details of names and addresses etc that you want to send your letter to. 1st mail uses the *.SDF file format for data that we discussed in the previous article in this feature.

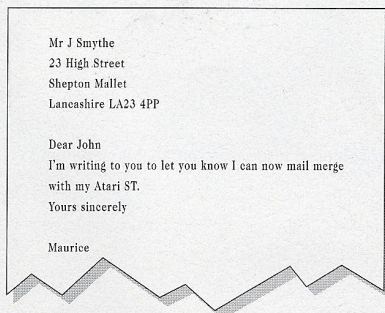
Secondly we require a document file. A document file is usually produced with a word processor. This document typically contains all the text to be printed on each letter along with codes to indicate which other elements go where. 1st Mail functions are activated by commands embedded into a 1st Word Plus document. So before you start 1st Mail you need both a data file and a document file.

The data file is easy – we did that in the last section. Either use a database such as Superbase Personal or type it directly into 1st Word Plus. Remember that the *.SDF file is an ASCII file so when you save it from 1st Word Plus you must first switch WP mode off.

Our document file needs to be produced in 1st Word Plus. It is here we need to understand the use of the 1st Mail command system. Any text entered into the 1st Word Plus document in the text style Light is treated as a 1st Mail command. All text entered in normal black text will be printed as part of your document except when it follows a 1st Mail command.

Step 1

Prepare the basic text of your document. In this case we will use a very simple one sentence letter:



Now print out the letter and check it looks OK on the page.

Step 2

Now we want to 'generalise' the letter so that we can use it for our mail merge. First we need to read the first record from the data file. Our first command would be something like this:

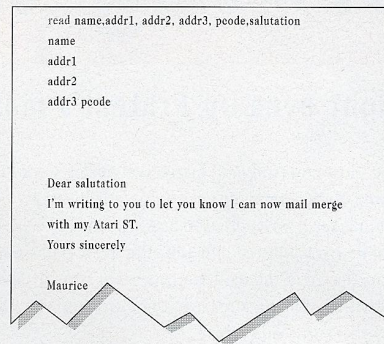
```
read name, addr1, addr2, addr3, pcode, salutation
```

The word 'read' should be in light text style to show that it is a 1st Mail command. This would read the first six fields from record 1 in the *.SDF file and put them into our six specified variables. If Mr J Smythe in the example above was our first record then the variables would contain the data as follows:

name	Mr J Smythe
addr1	23 High Street
addr2	Shepton Mallet
addr3	Lancashire
pcode	LA23 4PP
salutation	John

Step 3

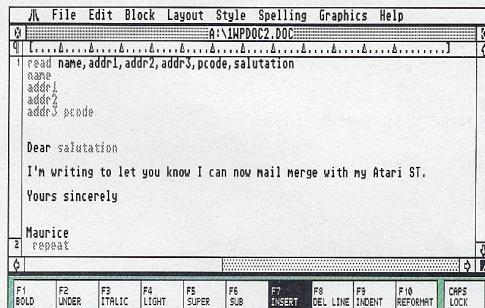
Now we need to tell 1st Mail where to put this information. So we would edit our document to look like this:



Step 4

Finally, (according to the 1st Mail manual), at the end of our document we need to add a hard page break and the command repeat. The hard page break should ensure that each letter is printed on a separate sheet of paper. The command return says to keep processing and printing letters until you have printed one for each record in the database.

Your screen should look like this:



A document prepared for mail merge using 1st Word Plus.

However this is certainly not true with the latest 1st Mail version 3.06 (the one supplied with 1st Word Plus 3.20TT). The hard page break is ignored. Hence to get each letter to print correctly you need to add blank lines to the end of your document so that the last page is just a full page; ie if you added one more carriage return you would get a soft page break just before it.

Step 5

Now all we need to do is run 1st Mail. You will first be prompted with a file selector for the name of your document, then for the name of your data file. If everything has gone according to plan your mail merged letters should now be rolling out of your printer.

Tricks and tips

Don't charge in to your first mail merge with a data file of 500 names and addresses each of which you want to send a ten page letter! Start with something very simple – a short one page letter and two names and addresses perhaps. When you have got that working correctly then is the time to get more adventurous.

Beware when using the 1st Mail command datafile to define the file containing your data. It must be in a separate 1st Mail command file – not in your main document – else all your letters will be printed addressed to the first person in your data file. This is not at all clear from the 1st Mail manual – which is generally not a model of clarity!

If 1st Mail looks daunting to you then don't panic! There are easier and often better solutions available with low cost programs such as Write On as well as 'the big three' that we cover later – That's Write, Protext and Papyrus.

Working with Protext

Andrew Wright eyes up Protext's mail merge capabilities.

Protext has one of the most powerful mail merge systems of any word processor available on any computer. However complex mail merge with Protext is not for the faint-hearted - some of the commands are quite difficult to get the hang of. Similarly to That's Write, Protext uses printer internal fonts and hence prints at high speed. This again makes it well suited to larger mailings.

While a basic mail merge is not too difficult - the manual has some good examples - it is certainly not as easy as with other word processors. This is principally because the design of the mail merge system is really suited to the 'power mail merging'.

Protext is much more flexible than most in the format in which it will accept data so if your data files are large and exist in a non standard format then it is probably only Protext that will read them.

Similarly Protext gives you great power to change the letter based on variables that form part of the merge. For example if you want to mail merge a letter to all the parents of the children that are in years 8, 9 and 10 at your local school asking them to attend a Parents evening, then you can set up Protext to insert different dates and times depending on which year the child was in - subject of course to the year information being part of each record.

A typical Protext document to do this would look something like:

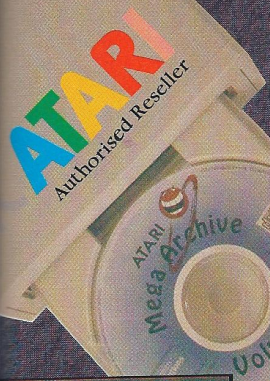
```
> CO Parents evening letter ; comment
> DF PARENTS                ;Define the data file as PARENTS
> CO                        ;read next record from the file PARENTS
> RV parname,childnam,addr1,addr2,addr3,addr4,year
> SV date='dummy'           ;set Variable date to value "dummy"
> IF year="8"               ;Test if year 8
> SV date="5th March 1995"  ;set variable date
> EI                        ;end if
> IF year="9"
> SV date="7th March 1995"
> EI
> IF year="10"
> SV date="11th March 1995"
> EI
> SK date='dummy'           ;If not year 8, 9 or 10 then skip this record
&parname&
&addr1&
&addr2&
&addr3&
&addr4&
Dear &parname&
I'm writing to let you know of the forthcoming parents evening at Kingsbridge school.
We would very much like to see you to discuss the progress being made by &childnam&.
Your appointment has been arranged for &date& between 19:00 and 21:00. All of &childnam& teachers will be available on
the evening .
Yours sincerely
```

John Smythe
Headmaster

In Protext terms this is a simple example of what can be achieved using the command system called PROMERGE. If you need ultra powerful mail merge then Protext is your answer - but don't expect it to be easy!

Protext's PROMERGE commands

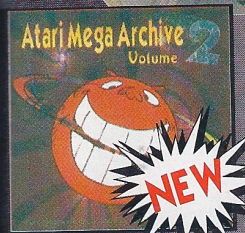
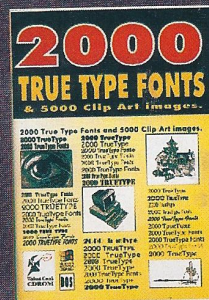
```
> AV Ask for variable (data) from keyboard
> CF Close data file
> DC Set the decimal character
> DF Define data file
> DP Set the number of decimal places to be displayed
> EI End IF condition
> EL ELSE part of standard IF THEN ELSE structure
> ID If variable defined then print block
> IE If data file exhausted then print block
> IF IF part of standard IF THEN ELSE structure
> IU If variable undefined then print block
> IN Insert file into text
> RL Read Line (used for standard SDF files)
> RP Repeat
> RU Read variable unconditionally (used when all records in the data file have the same amount of fields)
> RV Read variable (used when records in the data file have variable length)
> SK Skip copy if condition true
> SV Set variable to a particular value
> UN Until the condition is true
> WC Write file close
> WF Open file for writing
> WF ON/OFF Turn writing to file on and off
> WM Write message to file
```

CD-ROM's

from

System Solutions



Latest PD/Shareware
Compiled in the UK



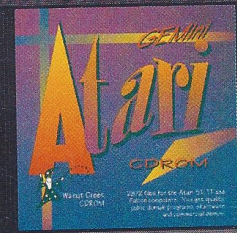
PD/Shareware Menu
Hear Mods, See FLI's + more



1st Falcon Only
Demos, Games, Music & PD



Texture Graphics
24bit Colour & Greyscale



The Original USA
Atari PD & Shareware CD



USA 2 CD Set
Uncompressed everything



500 TrueType
+ 8000 clipart, 30Mb Signum



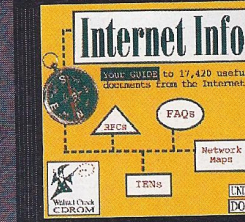
Cubase CD
The Essential CD for all Cubase users



German PD & S/ware
Music, Graphics, Midi etc.



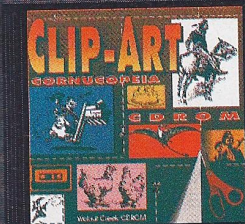
More fonts than most
300 GDOS, 500 CFN's + more



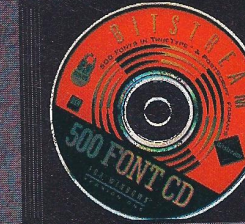
17,420 essential files
Most useful internet info



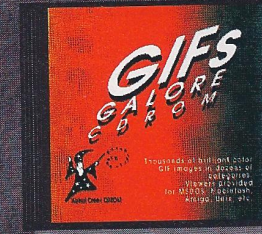
Complete OS on CD-R
Gem Installation program



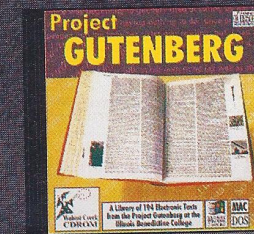
5050 Mono images
95 categories in PCX format



Bitstream's finest
For NVDI 3 or SpeedoGDOS



5000 Images
Art, Maps, 20+ categories



194 Text files
literature reference



Optional Catalogue
1000 CFN fonts + more.

For all these and more call

Tel: 0181 693 3355

London Showroom and Enquires
17-19 Blackwater Street, East Dulwich,
London. SE22 8RS



Please fill in this form to register for our CD Database list. Please include a blank disk (DD or HD) and an SAE to receive our comprehensive disk catalogue.

AW Issue 8

Name: _____ Address: _____

CD Rom Drive Owned: _____

Please return to System Solutions, 17-19 Blackwater Street, East Dulwich. London SE22 8RS.

Falcon Games on CD

System Solutions and the Atari Workshop are tradenames of Brandt Fernandes (Europe) Ltd.
Company registered in England 2612998. E&OE

Mail Merge with That's Write

Neal O'nions looks at Compo's premier WP package.

That's Write, particularly version 3, has powerful mail merge features which, combined with its ability to print using a printers internal fonts for high speed printing of large mailings, make it a good tool for mail merge.

Within a That's Write document you specify the field to merge at a particular point in the form #n# where n is the number of the field you wish to merge. Hence a simple mail merge letter might look something like this:

T'WRITE 3 File Block Type Style Layout Edit Options																
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1: spudmail.tw P1 A1 Page 1 Line 1 Column 1 I																
#1#																
#2#																
#3#																
#4#																
#5#																
#6#																
Dear #7#																
It's Show Time Again!																
Yes it's that time of year again - time for the annual carrot and potato growers show. This years event promises to be our biggest ever with everything you can imagine for both professional and amateur carrot and potato growers.																

Call up mail merge from the file menu:

T'WRITE 3 File Block Type Style Layout Edit Options																
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1: new1.tw																
New Text N																
Open Text... O																
Insert Text... I																
Last Version L																
Save S																
Save as... A																
Export... X																
Programs... E																
Disk Functions... F																
Set Window... W																
Print Preview V																
Print... P																
Mail Merge... M																
Quit Q																



Select a data file:

T'WRITE 3 File Block Type Style Layout Edit Options																
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1: spudmail.tw P1 A1 Page 1 Line 1 Column 1 I																
#1#																
#2#																
#3#																
#4#																
#5#																
#6#																
Dear #7#																
Yes it's that time of y																
years event promises																
professional and amati																

Mail merge

Directory: A:*.DAT

Selection: MERGE .DAT

DRIVE:	A	B
C	D	
E	F	
G	H	
I	J	
K	L	
M	N	
O	P	

OK Cancel

Note that That's Write has no facility to remove blank lines from within an address so you do need to structure your data file so that all the blank lines are at the beginning or end of an address. That's Write does allow multiple records to be printed on a single page for printing address labels, membership lists and so on. The format for doing this is #> n#. Hence #> 1# would say print the first field of the next record here.

A typical document to printout on Avery laser labels product number L7161 is included on this month's reader disk. On screen it looks like Figure 4.

T'WRITE 3	File	Block	Type	Style	Layout	Edit	Options
1: label.tw	P1 F0	Page	1	Line	15	Column	15
0	1	2	3	4	5	6	7
8	9	10	11	12	13	14	15
16							
#2#							
#3#							
#4#							
#5#							
#6#							
#7#							
#10# #9# #11#							
#>2#							
#3#							
#4#							
#5#							
#6#							
#7#							
#10# #9# #11#							
#>2#							
#3#							

Figure 4

Notice how each address apart from the first starts #> 1#. Note also that the document is a multi column document. A document that looked on screen like Figure 5 would not work correctly as mail merge works from left to right then top to bottom. Hence the resulting printout would look like Figure 6.

T'WRITE 3	File	Block	Type	Style	Layout	Edit	Options
1: nogood.tw	P1 F0	Page	1	Line	2	Column	12
0	1	2	3	4	5	6	7
8	9	10	11	12	13	14	15
16							
#1#		#>1#		#>1#			
#3#		#3#		#3#			
#4#		#4#		#4#			
#5#		#5#		#5#			
#6#		#6#		#6#			
#7#		#7#		#7#			
#10# #9# #11#		#10# #9# #11#		#10# #9# #11#			

Figure 5

T'WRITE 3	File	Block	Type	Style	Layout	Edit	Options
1: !nogood.tw	P1 F0	Page	1	Line	8	Column	51
0	1	2	3	4	5	6	7
8	9	10	11	12	13	14	15
16							
Mr L Tegelgard		Mr S Daw		Mr B Alcantarilla			
Mr B Alcantarilla		Mr B Alcantarilla		Mr B Alcantarilla			
Westgate Services		Westgate Services		Westgate Services			
A63 Westbound		A63 Westbound		A63 Westbound			
HU15 North Humberside		HU15 North Humberside		HU15 North Humberside			

Figure 6



T'WRITE 3	File	Block	Type	Style	Layout	Edit	Options
1: spudmail.tw	P1 A1	Page	1	Line	1	Column	1
0	1	2	3	4	5	6	7
8	9	10	11	12	13	14	15
16							
#1#							
#2#							
#3#							
#4#							
#5#							
#6#							
Dear #7#							
Yes it's that time of y							
ears event promises							
professional and amat							

Mail merge

Directory: A:*.DAT

Selection: MERGE .DAT

That's Write 3

Print:

Print

OK

Cancel

Options in That's Write

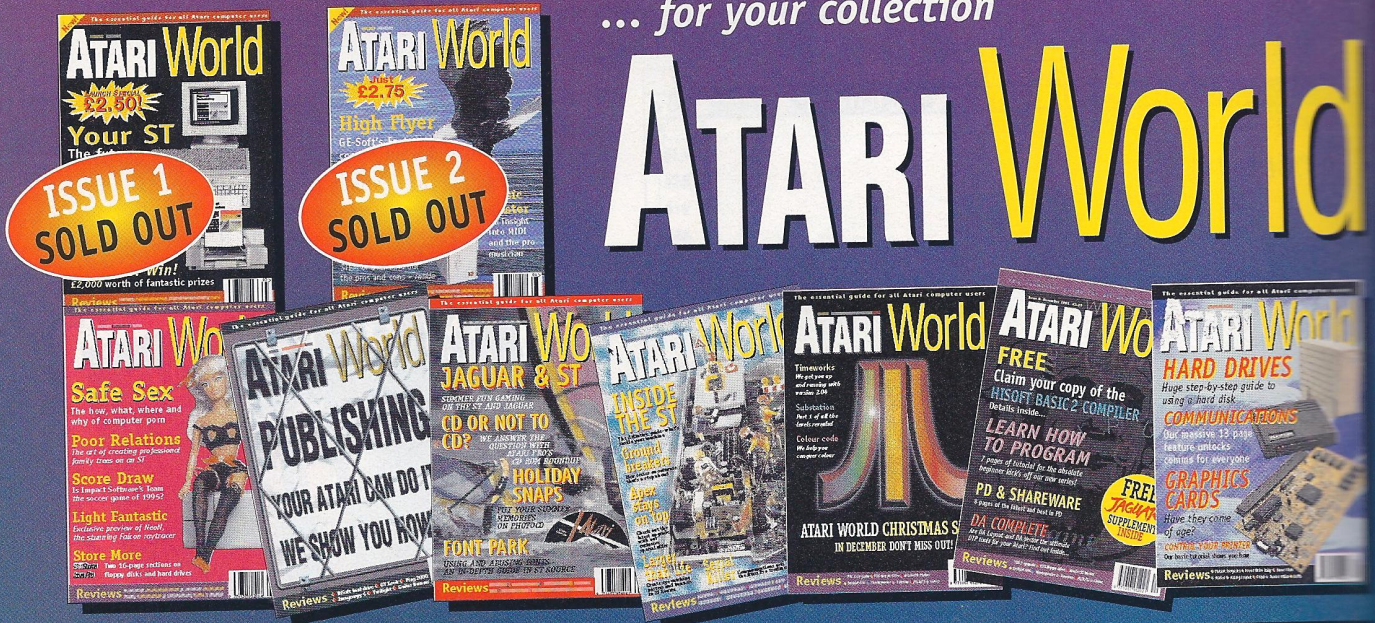
When you start a mail merge from That's Write you have 3 options. All means mail merge all the addresses in one continuous run. Query means That's Write will merge the first address and then prompt to see if you want to print it. You select either yes or no and That's Write continues with the next record.

Manual merges the first record and allows you to edit it before printing. Then merges the next and so on. This enables some quite sophisticated mail merge applications to be achieved particularly when combined with That's Write's system of instructions. This allows for instance a mail merge to create an invoice, compute VAT and totals in an automatic way.

Readers Disk &

... for your collection

ATARI World



Just for you – a Reader Disk rundown

- Issue 1 (1 Disk) ST-Guide Release 4, ST Guide Creator 4, Darklord v3.1, Pinhead v2.1, PacShell v2.59, Profile v2.08, TurboBlanker v1.24.
- Issue 2 (2 Disks) Speed of Light v3.8, Bootsie v1.74, World Clock v1.0a, GDOS-Check v2.0, Maus-Window v1.32, Duet v1.0e, Vericard v1.0, Thing v0.31e, Thing Utilities, Atari World Profile.
- Issue 3 (1 Disk) Thought 2 Demo, GD-Flag v1.15, Idealist v3.6, Fastcopy III, Kivi v1.37a, Atari World Profile.
- Issue 4 (8 Disks!) Address v2.2, AVFM v1.0, LED-Panel v3.1, Mouse23 v2.3, Atari World Profile, Turtle v3.2, Timeworks 2.01.
- Issue 5 (1 Disk) ImCon v1.1, InsChar and InsDate, Let 'em Fly! v1.3, MasterBrowse v4.9, OCR v1.4a, Text Analyzer.
- Issue 6 (2 DiskS) Apex Media demo v2.14, Freedom v1.14a, Atari World Profile, BootXS v2.21 demo, Egale v2.7i, HPLJ4ENG v1.0, iPRN v1.05, Two-in-One v1.40e, WINX v2.2, GEM RAM v1.6, IKARUS v0.14, Marcel v2.3, Kandinsky v2.02, Dirsort v1.1, SMF-Player, TWP HS-Modem v6, Disk Cake v2.1, Atari World Profile
- Issue 7 (1 Disk) Ruftrade v2, TruDisk v2.3, Zorg v2.02, MBE v1.01, De Capo v2.02a, ST Guide 1.4, Atari World Profile
- Issue 8 (1 Disk) Internet Access Pack: StiK, Crystal Atari Browser (CAB), CAB OVL, IRC.TOS, Teddy-TERM v2.14, FOLDNRNN, NBCBS, Listfont v1.6, Atari World Profile
- Issue 9 (1 Disk) Address v2.04e, HiSoft BASIC listings, Call FSEL v1.1, Protext macros, Spectrum emulator utilities, UDO Release 4.0e, ZControl
- Issue 10 (1 Disk)





Mail Merging with Papyrus Gold

Graeme Rutt goes for Papyrus Gold for professional mail merges.

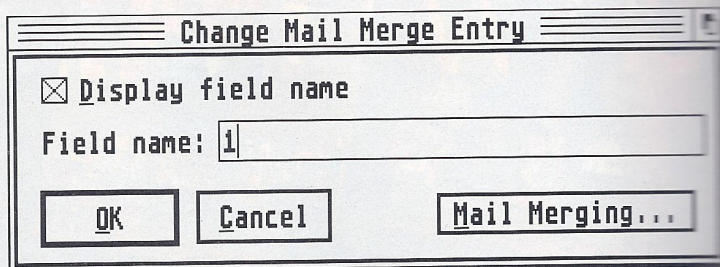
Papyrus is one of my favourite programs. It's a powerful word processor that adheres to the modern GEM standards. It's as equally suited to banging out the odd letter as it is to writing the odd book! However, I'd be the first to admit that if your premier requirement is mail-merging then Papyrus is possibly not the best choice.

The problem isn't its ability to mail merge - while it doesn't have the powerful formatting commands of Protext, it can still competently merge data. The problem is that all of Papyrus' printed output is sent as graphics and the printer drivers tend to be on the slow side.

My printer, a rather old laser, takes over two minutes to print a single A4 page and even a brand new Deskjet takes roughly 40 seconds. So, if you need to print a lot of mail-merged pages then look elsewhere - but if you just need to print a few pages every now and again Papyrus is more than capable.

Setting Up

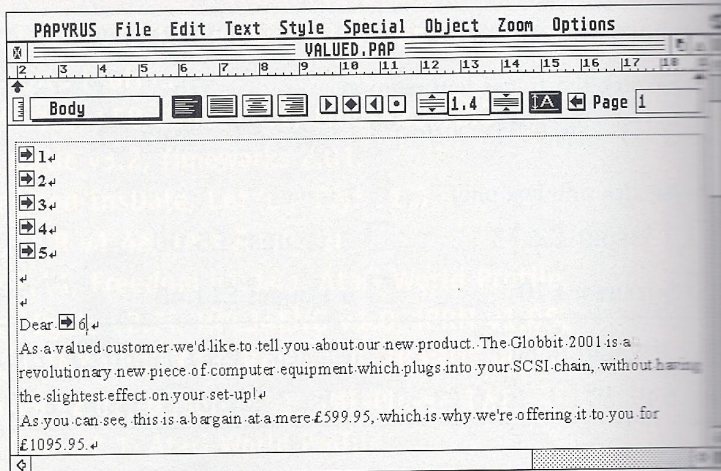
Once you've written your basic letter open up the Special menu and select Data Field.



This is where you enter your fields into your document, they will be entered at the present cursor position. You can give them different font styles as you would any other piece of text in your document. You'll normally use numeric entries (starting at 1 for your first field, etc.) for your field names. However, Papyrus supports a name file (see boxout) which, if it exists, enables you to use field names.

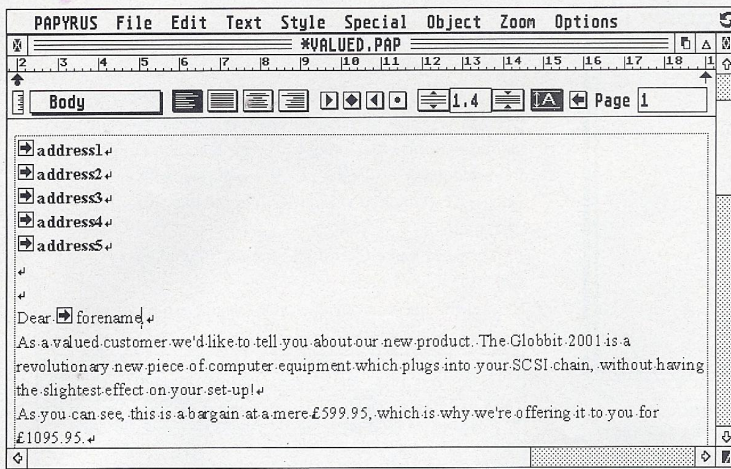
Unfortunately Papyrus has no way to remove blank lines in mail merged data. Earlier in this feature you'll find some ways of getting around this annoying problem.

If you like you can choose to hide the name/number by deselecting the Display Field Name checkbox. I'd suggest that you don't hide them - this can only confuse matters when you debug a non-working merge! Add as many fields as your data file contains, taking care to change the position of the cursor in-between each visit to the Create Mail Merge Entry dialogue box.



Your document with the fields included.

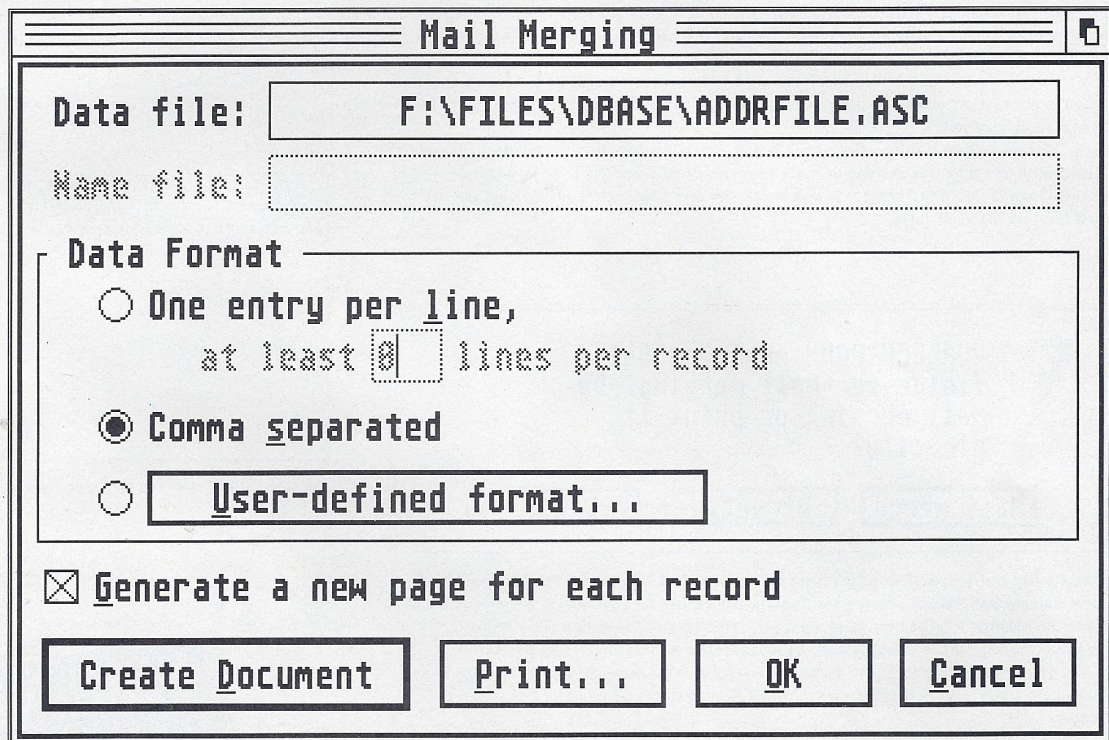




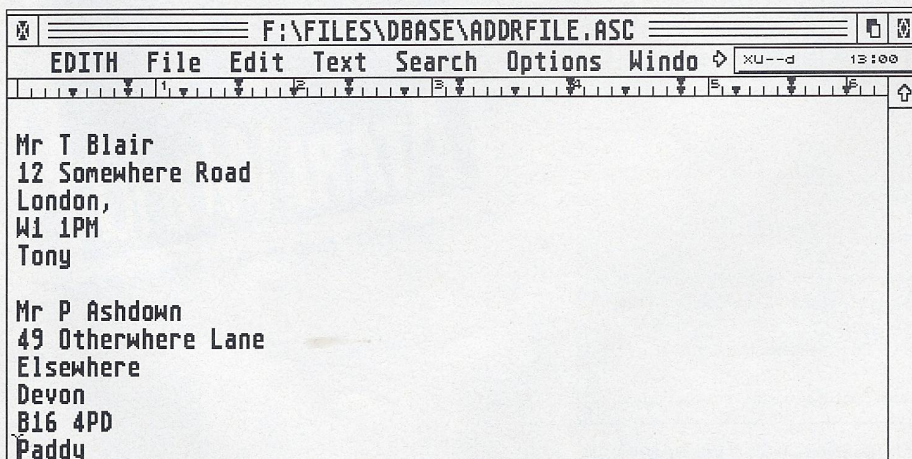
The same document using field names.

Your document should now look like one of those above. Now you can save it and move on to the mail merge itself. You get to the dialogue via the Mail merge... button in the dialogue box you've just been working in.

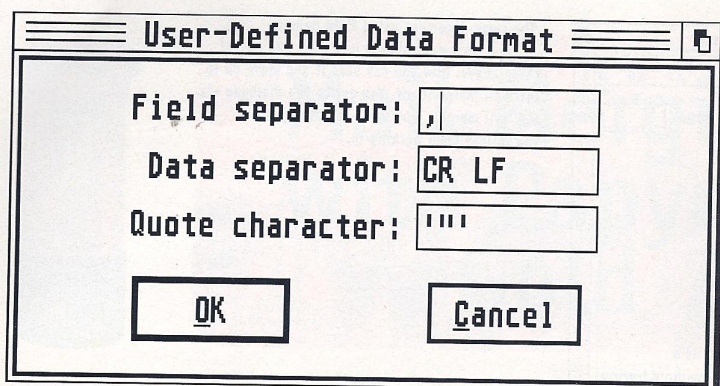
Merging



The dialogue looks like this. It gives you complete control over all aspects of your mail merging. For the purposes of this article we'll be dealing with comma delimited data exclusively - if you have problems getting your data into that format then you may like to check out the other options.



The One Entry Per Line button is used for data like this, where each field is separated by a carriage return.



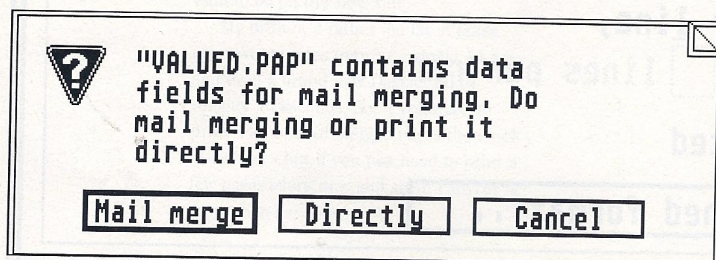
The User Defined format can be used for any data you may have in a non-standard format.

To create your merged document you must first click on the box next to Data File, this brings up a file selector in which you can choose your comma delimited data file. If you are using field names (rather than numbers) then you must also choose the correct file in the Name File box.

If you're making a standard mail merge, where each record makes a single letter, then you should make sure that Generate A New Page For Each Record is selected. This ensures that Papyrus will start each mail merged document on a new page - whatever the size of your document.

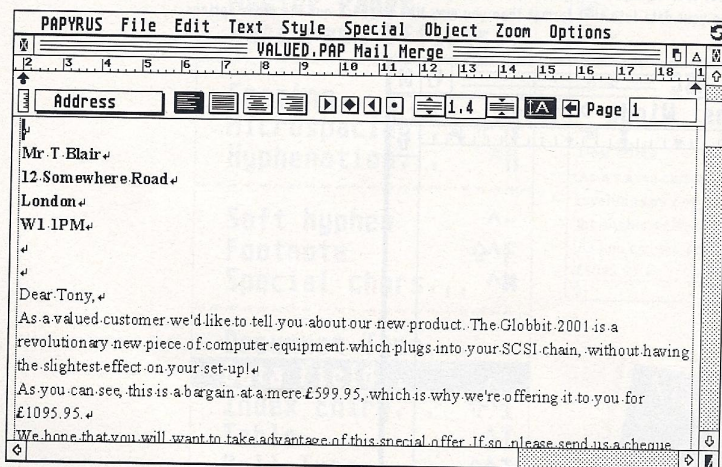
Now, to mail merge your document you need to select the Create Mail Merged Document button. As long as you have everything set up correctly Papyrus will create a multi-page document which you can then check for errors.

You should note that if you have many records in your database then the resultant file could be quite large. It's more than possible to create a document that's too large to fit in memory. If this is the case then you should first check your mail merge with only a few records and then use the step below to create the whole thing.



If you are sure that your mail merge is correct and will work first time then you can use the Print... button from the Mail Merging dialogue box. This can also be used for large merges where you'd run out of memory otherwise - but you should be warned this process is still open to memory problems. It's yet another reason why Papyrus shouldn't really be used for large mail merging requirements.

If you hit the Directly button Papyrus will merge your document and print it out page by page. Bizarrely (in a rare moment of poor design) the Mail Merging button takes you back to the previous dialogue.



And that's just about it. A reasonably painless, easily performed process, that's as well designed as any other in Papyrus. If only the printing was faster this would be a brilliant program for uncomplicated, high quality mass mail merging - maybe the long awaited Papyrus 4 will solve that little problem.

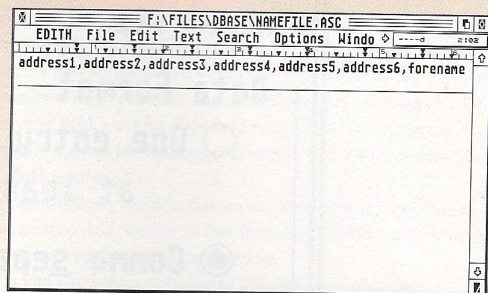
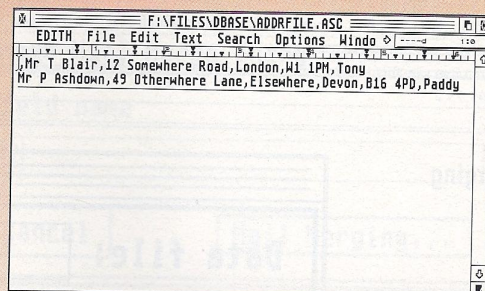
Field names

Rather than use numbers Papyrus enables you to use names for your fields. This can make complicated documents much easier to organise. It does, however, mean that you need to generate another file, along with your standard comma delimited data file. Thankfully this is a relatively easy process. If we look at simplified data file like this:-

Mr,Tony,Blair

Then our name file would be something like:-
title,forename,surname

And the fields in our document would use those names.

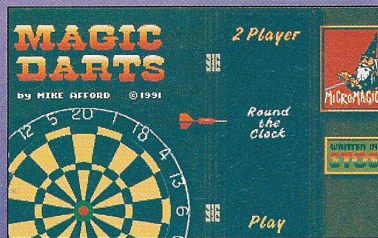


The data file and name file for the example used in the body text.

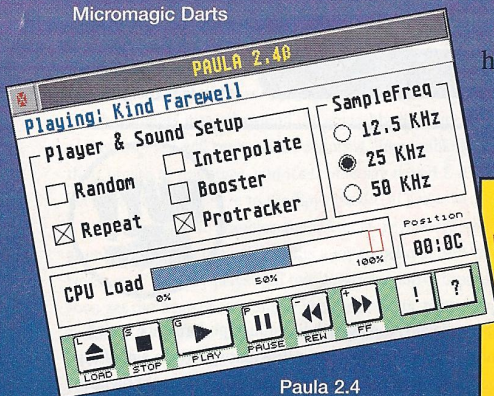


GOODMAN'S

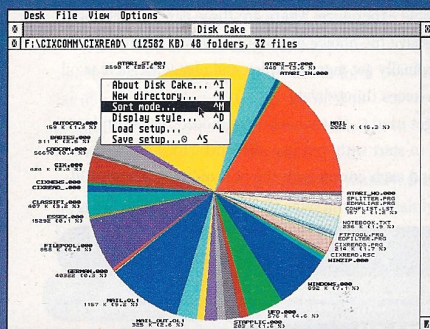
THE COMPLETE PUBLIC DOMAIN AND SHAREWARE SERVICE



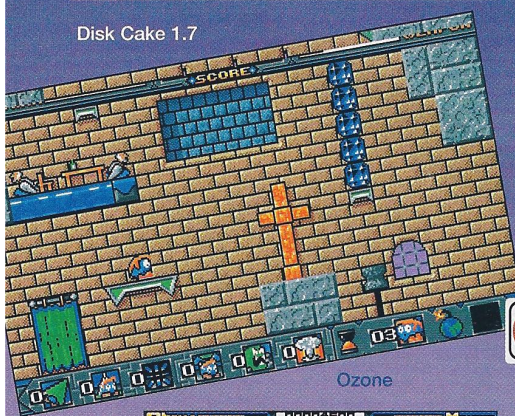
Micromagic Darts



Paula 2.4



Disk Cake 1.7



Ozone



Ozone

No matter how much coverage the ST Magazines give to Public Domain & Shareware, they only give you a sampler of the vast range available. As one of the longest established ST libraries in the World, we are constantly adding new titles to our, already extensive collection, so why not send today for our comprehensive PD & Shareware Guide, it's now approaching 260 pages, with good descriptions, screen shots, etc.

SHAREWARE GUIDE STILL ONLY £2.95

FREE DISK VOUCHER

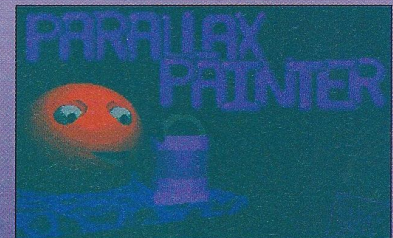
When you purchase Shareware Guide Redeemable when you purchase 5 disks or more *or* order any 5 disks and receive Shareware Guide FREE!



All Prices Include UK Carriage



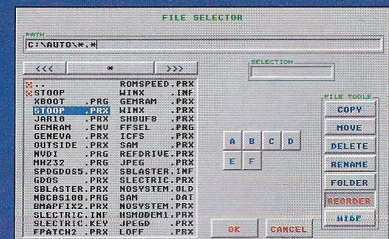
Goodman's (DEPT STW)
16 Conrad Close,
Meir Hay Estate, Longton,
Stoke-on-Trent. ST3 1SW.
TEL: 01782 335 650
FAX: 01782 316132



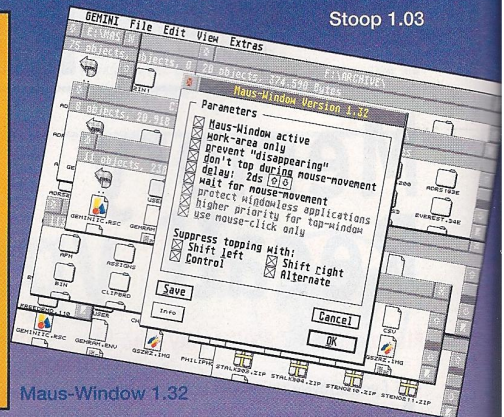
Parallax Painter



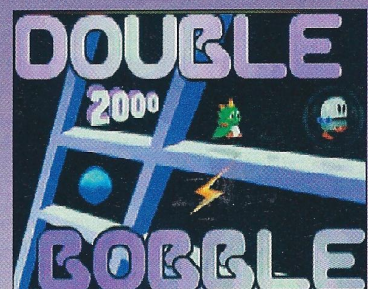
Easy Money



Stoop 1.03



Maus-Window 1.32



Double Bobble 2000

Getting Read

Tips from the Pro's on getting the best response to your mail merged letters

Getting read

Mail merge can be used for a wide variety of different applications. However most mail merge activity is basically to sell something. Be it to sell a service, sell an item or event or sell people the idea of being a volunteer or attending a meeting.

In this section we will concentrate on getting your mail read. The lessons here apply to all mailings not just those to sell a product. For this purpose we describe mail merged documents as direct mail.

TIP Identify exactly what it is you are trying to achieve with the mail merge.

Identify it in sales terms, however un-commercial the activity might be. For example you might be writing to the local school governors to let them know the date and time of the next governors meeting. The job of your direct mail is not really to tell them date and time of the next meeting – it's actually to sell them the fact that they are going to turn up to the next meeting!

TIP Make your direct mail fit the job.

Now I don't know what the attendance is at your normal governors meetings. It maybe that you get a full attendance every meeting. Just letting your Governors know that there is a meeting may be enough to get them all to attend. However if the last meeting saw a turn out of only 50% and no apologies for absence then clearly your mail merge needs to say something more than just the date and time of the next meeting. It needs to sell them the idea of attending much more actively.

As part of making your direct mail do the job is making the direct mail look the part. Little brown envelopes will do fine in some circumstances but not for selling

TIP Define the 'response mechanism'.

Having read your direct mail, what is it that you want the recipient to do? In the case of the governors meeting you want them either to turn up or to give there apologies to the chairperson. In which case make sure all the details that they might need to know are included. Date, time, venue and so on plus telephone number and address of the chairperson or clerk for apologies. Don't assume anything. Having decided what the desired response is, make sure the content of your mail merge is designed to achieve that response.

Another way of using mail merge might be to take some of the chore away from writing or addressing Christmas cards. Here the response mechanism might be 'a nice warm glow' on the part of the recipient. However the other response you might like is a Christmas card back. Nothing is going to help that more than making sure the recipient of your card knows your address. What about a little label on the back of the envelope with it printed on?

TIP Stationery makes it easier.

Your local stationery store has many items to make the mail mergers life easy. Perhaps the greatest of all mail mergers tools is the window envelope. Nothing is worse than getting personalised letters and there corresponding address labels muddled up. With a window envelope the letter acts also to address the envelope. You can guarantee the name on the envelope is the same as the one on the letter!

Sometimes labels as opposed to window envelopes are necessary. Labels come in many different shapes and sizes to suit many different printers. If you have a laser printer make sure you use labels specifically designed for use with a laser printer. Other labels may peel off when subject to the heat of the laser and jam up the insides of your printer. Laser labels generally work well with inkjet printers as well.



Don't reinvent the wheel.

If you have managed to live a life avoiding direct mail then I suspect you live a very boring life! Otherwise I'm sure that your household like every other in the country gets direct mail. It comes in all shapes, sizes and formats. From Reader's Digest, the local double glazing company, the national double glazing company, every insurance company under the sun, banks, shops telling you about their sale, the dentist reminding you that your check up is due and so on.

If this junk mail did not produce responses then it would not be sent in the first place. Producing junk mail that stands a good chance of being read and acted upon is an art and a science rolled into one. When you are planning your mail it may be the most important thing on your agenda, it may also be very important to your recipient to, however making sure it even gets read may require some careful planning.

Study your own mail. It comes in all shapes and sizes. Why? Because differing shapes can attract a response. Why does your electricity company display its name on the envelope when it sends you your bill? Simply so that when you look at the envelope you know it's your electricity bill before you even open it. Hence your electricity bill does not get binned before it's been opened, unlike some of a lot of people's mail.



Personalise, personalise, personalise.

People respond much better to mail that addresses them directly. If your style when writing a personal letter to someone is to address them as Dear John, then make sure your mail merge addresses them as Dear John, not Dear Mr Smith or worse still Dear Mr John Smith. The power of mail merge is the ability to produce a number of personalised letters quickly and easily. Make sure you don't get lazy and produce mail that looks like a bad example of a mail merge.



The larger your mailing the more you should test.

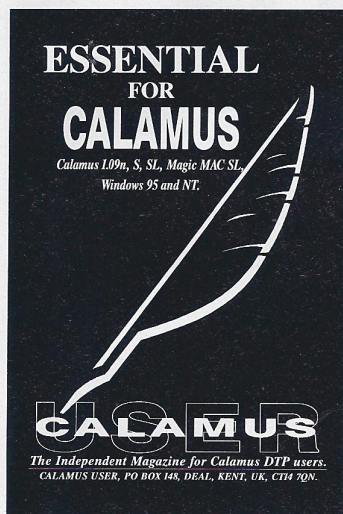
There is nothing worse than spending lots of your time and money on a large mailing and getting no response. However good your proposition may sound to you – if your target audience does not want what you are selling they are not going to buy. But perhaps they would want it if it was presented in a different way.

Let's say you are writing to tell all the parents at your local school about the annual school dinner dance for parents. Try your mailing first with just one class. If out of thirty parents you only get three sign up for the dance – you know something is wrong. Just 10% of all parents will not fill your event so it's time to rethink the message. Perhaps you focused too much on the new computers the event will fund and not enough on the fun everyone had last year or perhaps it's the other way around. Whatever by testing you have given yourself the chance to change the message to get the attendance you need.



Clubbin'

It's not a fanzine and it's not a replacement manual - Harry Sideras takes a look at Calamus User to pick up hints on our premier DTP package.



Calamus User - the essential add-on

Steve Llewellyn of Calamus User knows all about practical support - he's spent much of the last decade doing just that. In terms of support for Atari products he ran the GFA Users group before turning his attention to Calamus around 1992. The aim was to complement rather than duplicate the

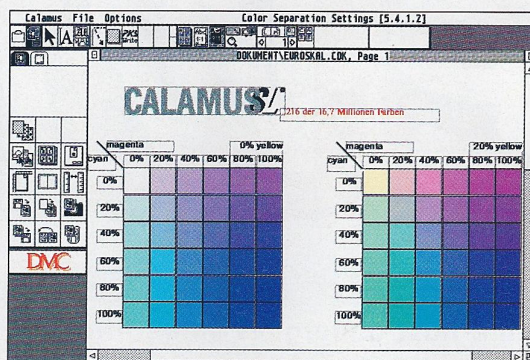
Making contact

Calamus User magazine is available both singly at £3 and as a 4-issue subscription at £10 (slightly more for overseas). To subscribe and to get details of back issues and their other services, write to:

Calamus User
PO Box 148
Deal, Kent
CT14 7QN
or email caluser@cix.com-
pulink.co.uk

In the USA, contact:

Dave Trutzenbach
Atari DTP Roundtable
Shamong, NJ
Tel: (609) 268-7524
Atarinet: 51:1/18.0



Calamus SL bringing colour control on screen and in print. Calamus User aims to help show us how.

work of the distributors by concentrating his attention on what the manuals don't tell you.

Support begins with Calamus 1.09n and goes right through Calamus S and SL to the Windows NT version and even the brand new Windows 95 version that's just been released. Indeed, while Steve's involvement began with v1.09 in 1988, the Calamus User magazine has been laid out with Calamus SL running on a TT for much of its history and issue 5 has been completely prepared with the Windows NT version with the help of many of its external modules, so he knows well the quirks of each incarnation.

Originally the magazine was intended as a quarterly publication but due to a family bereavement around the time of the fourth issue it has slipped well behind over the last year. However, issue 5 was prepared in time for the Atari World shows in December and Steve was just as keen as ever when I spoke to him just before. He never misses an Atari show.

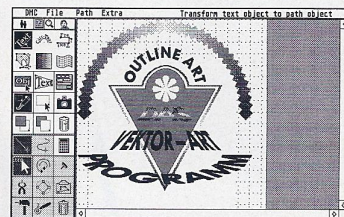
Checking it out

Calamus User magazine now has a settled format comprising an editorial, newsdesk, commercial and PD product reviews, hints and tips and a question and answer section. In the most recent issues a new series entitled Creative Calamus has begun. In total you get 14 pages printed on high quality paper.

Steve has contacts with DMC in Germany and Canada as well as those companies producing new modules for use with Calamus SL, so his information is straight from the horse's mouth and he's able to advise a source for those products not available in this country.

The reviews are largely covered between Steve and two others. Canadian George Bradford has a background as a writer and font designer, having created commercial Calamus fonts, and has contributed novel articles on creating both simple and more complex vector graphics as well as type design and the new Creative Calamus series. Bryan Cox is a professional designer and printer and has contributed on the use of scanned material within Calamus.

Between the three of them they run an expert eye over the capabilities of the program and provide help on the use of support programs, ranging from Outline Art to DA's Vector as well



Outline Art allows us to create our own vector art. Hints and tips within the magazine shows how to make effective use of it even if you can't draw for toffee...

as all the PD utilities they can round up.

Steve looks after the Hints & Tips and Q&A sections with the help of Mark Skillin, solving readers problems and giving some enlightening tips on producing text effects and combining text with graphics. With the 'icon shock' most people suffer with Calamus it's no wonder these are a popular part of the mag. There's also plenty of advice on how to overcome problems with the use of fonts and images from other vector art packages.

In spite of the coverage of so many aspects of using Calamus there's an open invitation for readers to contribute their own tips or articles to keep the magazine fresh with ideas.

Optional extras

In addition to the magazine, Calamus User provide several other services. The main one is the User to User hints series which has been licensed from DMC Publishing in Canada and comprises the hottest tips on optimum settings, macros, layouts and conversions as well as numerous tutorials.

Also the magazine has themed clipart and font disks at PD prices and provides a font repairing service for those badly designed or incomplete PD fonts that can sometimes cause newer versions of Calamus to crash. They've now got 100 fonts crammed onto five disks, so it's likely that whichever one you were having a problem with, it has already been fixed.

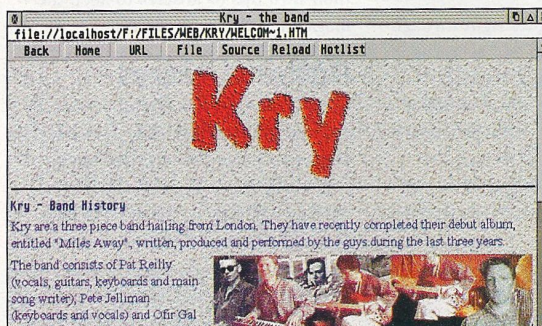
Finally there's a small range of PD utilities disks covering everything that's available for Calamus, so now you know why Calamus User is really a one-stop shop for all the help you need.

Feedback

Feedback is always welcome, either at the magazine address or via email to sideclery@cix.compulink.co.uk. Online, you can join the NeST support echo N.SUP.ATARI_WORLD at any NeST BBS or on CIX join the atari.world conference.

NEWS FROM *the Wire*

In which Graeme Rutt undergoes something of an identity crisis - but comes out fighting...



Over the months since Atari World's inception there's not a regular column that's changed more often than this, the comms column. Starting off with a series on web building (very much before it's time, I'm afraid), veering into the delights of comms for beginners and last month merging into ST Source. It's had an identity crisis that I, as its writer, was none too happy about.

Something had to change and - thanks to the recent Atari shows - something has changed. For those of you who weren't at the shows, or didn't visit the seminars, I can report that the interest in comms was very high. As someone who's pushed for the subject's inclusion in Atari World (and ST Review), in the face of sub-5% interest in the polls, it was good to see this sea change in the number of upraised hands.

So, from now on these pages will be devoted to comms related news, it's got a brand spanking new name and will cover

everything from the Atari bulletin boards, through new comms related products, to the Internet. For those of you who are new to comms these pages should still be of interest but we're also working on expanding the coverage in general and bringing you your very own beginners pages.

Crystal Atari Browser

The biggest news this month in all the Atari comms forums I read was the release of a new version of the Crystal Atari Browser (CAB). Whilst there's no way to get around the fact that this is not a stable program (the on-line bits crash *a lot!*) there's also no way to deny that it's turning into a very classy package.

The author of the browser part of the program, Alexander Clauss, is a genius. A one-man-band who could give the multi-man Netscape Corporation a run for its money in the browser stakes. The latest incarnation has support for many of the Web tags which were previously missing: tables, forms, resizeable fonts, the ability to change screen colours, background images etc.

All the graphical bits are in now apart from transparent GIFs and the ability to load JPEGs - both of which must surely come in the near future. It makes CAB a tour-de-force in Atari coding terms - a perfectly written program as happy on a 1Mb Mono STFM as it is on a 256 colour Falcon.

All that's needed now are the on-line bits to be re-vamped and the bugs ironed

out. Atarians can then face the new graphically pleasing online world with just as much enthusiasm as the Netscape running PC owner (only Netscape can't run on a 1Mb computer you can pick up second hand for fifty quid!).

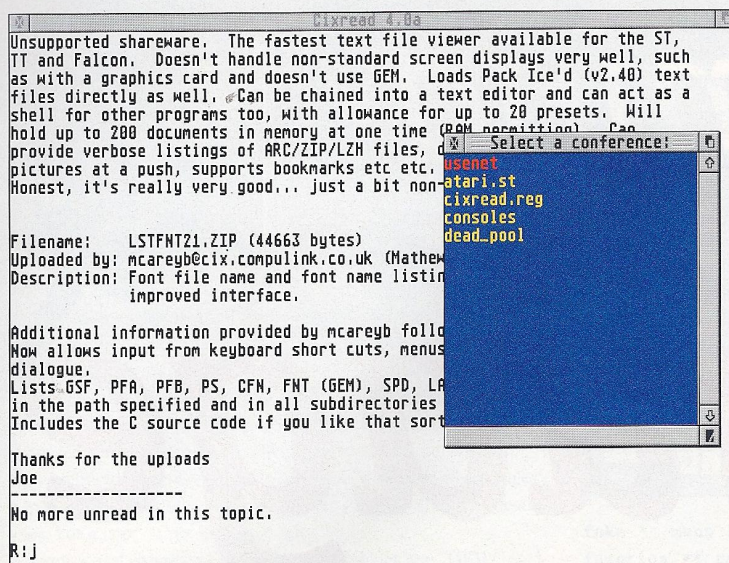
The Crystal Atari Browser appeared on last month's readers disks and the latest version (1.16) is available from many BBSs.

So where's the rest?

Most of the media would have us believe that the Web is the whole of the Internet. After all, that's the pretty bit with the graphics and such-like, that looks so good on the telly and the colour supplements. But you know, and I know, that this is far from the truth. The nuts and bolts of the Internet are email and ftp (file transfer protocol).

CAB can't do this. Why should it? It's meant to browse Web sites. So where are the other applications that take advantage of the relatively painless STiK direct Internet access software? Sure you can use Oasis or NOS, or even the strange software meccano of MiNT and MINT but I for one don't want to.

That's why I was so pleased to hear some whispers at the Atari shows about email and ftp programs being written to take advantage of the STiK network layer. I'll try to hunt them down this month and bring some more definite news on their progress in the near future.



Cixread 4 in action, with some cool GEM interaction.

CIX

Back in the non-Internet world I'm pleased to see that the redoubtable Kev (kebab@compulink.co.uk) has brought out version 4 of Cixread, the off-line section of the off-line reader for CIX. Although this version doesn't offer a host of new features it does speed up operation and enables users (at last!) to delete messages without recourse to a separate program.

It's also the basis for some great new things, long promised by Kev, like better GEM support and graphical threading (where the links between messages are shown on screen). If you're an Atari commms enthusiast and you're not already aboard the CIX train maybe it's time to give it a go. You can join on-line by aiming your modem at 0181 296 1255, credit card in hand.

BBS of the month

This month's BBS is the Penske BBS, based in Kidderminster, run by Andy Taylor. This is a great board, covering just about every messaging network I've ever heard of and some I didn't (did you know there was a Fire and Safety Services Network?).

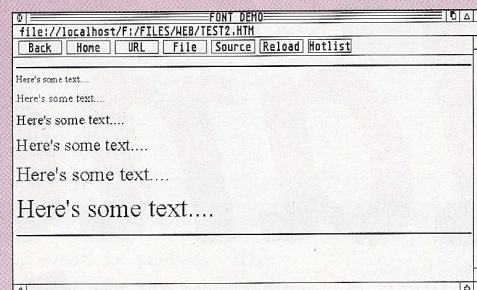
There are lots of files - including downloadable help files - in all the usual categories. And, quite unusually, no limits or quotas. This means you can download as much as you want - but try not to abuse Andy's hospitality!

All users of the board even get their own Internet address - a really nice touch. So if you're looking for basic 'Net connectivity on the cheap then maybe this is the board for you.

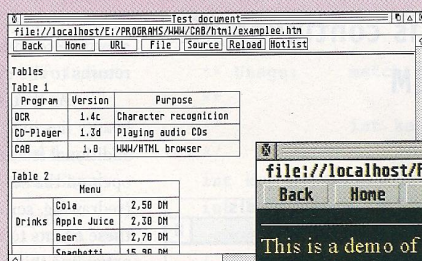
The number is 01562 743661.

CAB extensions

So you've read the blurb, what do all of these new extras mean? Well, taking into account the 1 picture/1000 words axiom, I thought I'd include this little guide to the new-found graphical pleasures on offer. Does this mean I get paid for an extra 5,000 words, Ed? (Err, no - not after those grumbles in the first paragraph! Ed).

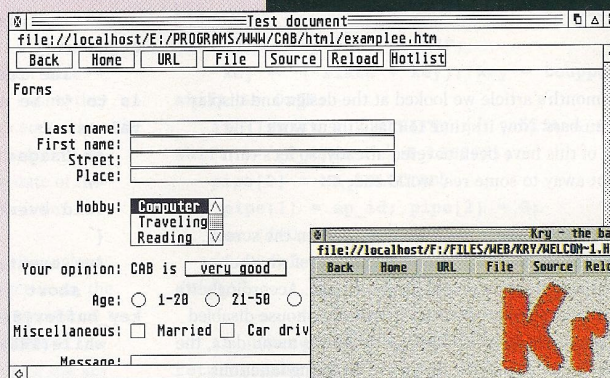


Different font sizes can be used for great effect.

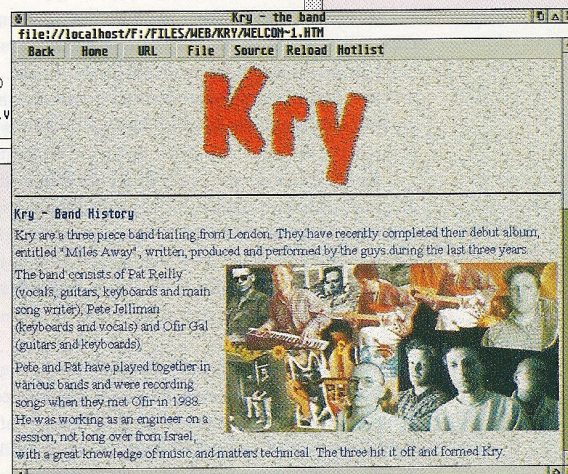


These are tables, great for laying out price lists and other info.

Pages can now be shown with different background colours.



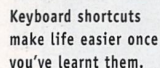
Here's a HTML form, used for sending data in a set format to the owner of the page.



And here's one I made earlier, showing the powerful background image effect, along with a transparent GIF (for the logo) and "floating" image for the collage.

the Wire

As it stands, this skeleton loop looks pretty bare - its beauty lies in the modular structure which makes adding additional features easy. For example: if the program has a window open on the screen, it will need to process window events (redrawing, scrolling etc). No problem - just add lines detecting these events to the switch construct. Another example of extending this code is the addition of keyboard shortcuts: see the Box for details.



As soon as the menu bar has been displayed on the screen, GEM will allow the user to play with it, regardless of whether or not your program is ready to process menu events. Accordingly it's probably best to leave either the menu bar or the mouse disabled until the program is ready to go. To begin receiving menu data, the program needs to call one of the AES event handling functions.

Example C code for doing this is shown in Listing 1. The program waits for a GEM event, checks that it is a menu selection and then jumps off to some further processing code (the `menu_event()` function). This code returns a value of FALSE (0) if the user has done something that should end the program (like choose the Quit option). Any other return value causes the while loop to continue.

The `menu_event()` function is really simple to program: you could write it as a long switch construct checking each possible menu item against the data held in the message buffer. For anything but small programs though, this gets a little cumbersome. To make things more manageable, divide the task up: `menu_event()` decides which drop-down menu is being accessed by checking `buffer[3]`; and then passes control to a function dedicated to processing items from each individual drop-down.

78 ATARI World February 1996

Keyboard shortcuts

Making program functions available on drop-down menus is fine for the beginner who is learning how to drive your program, but what about the more practised user? Once they have some experience with a program, most people find that it's distracting and time-consuming to have to continually swap between the keyboard for data entry and the mouse for selecting menu items.

To cater for these people, it's worth adding keyboard equivalents for at least the most frequently used menu items in your program. The first thing to do is to decide on which key combination should be used for which menu option. Some are fairly obvious: Control-Q for Quit, Control-O for Open, others may take some thought.

A while ago now, an international group of programmers led by Atari World's technical editor Ofir Gal, came up with a list of proposed standard shortcuts. It includes suggested keyboard equivalents for common menu items found in almost all packages (Open, Close, Quit etc), along with some more application-specific ones. For a copy of the list, send email to gemkeys@ogal.compulink.co.uk with the subject line "GEM Standard".

Once you've decided on the keyboard equivalents for each menu item, the next step is to include them on the drop-down menus to remind the user which keys to use. By custom, keyboard equivalents are placed at the righthand side of a menu. To indicate a control-key combination, the caret character ^ is used as a prefix: ^Q indicates Control-Q.

Finally, you need some code to detect and act upon the keypress. This is easy if you are using the Listing 1 code. Simply:

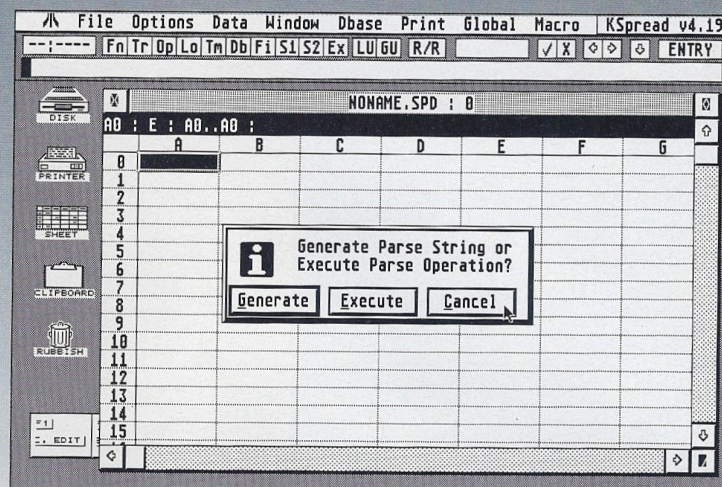
```
oInclude MU_KEYBD in the evnt_multi() call so
the program can see keypresses:
evnt_multi(MU_KEYBD|MU_MESAG,.....)
oAdd the following lines of code just after
the evnt_multi() call:
if (event & MU_KEYBD)
{
if (key_map(key,shift,key_buffer) == TRUE)
if (menu_event(key_buffer) == FALSE) return;
}
```

Include the function in Listing 2 in your program. This analyses the keypress data returned by `evnt_multi()` using the XBIOS function `Keytbl()` to make sure that it copes correctly with the different nationalities of ST keyboard. Once this has been done, the function compares the keypress and the state of the various modifier keys (Control/Alt etc) with a table of the shortcuts supported by the program.

Each keyboard shortcut is specified by a set of 4 numbers: the state of the modifier keys (or 0 for none), the key itself, the index of the drop-down menu and the index of the menu item to be triggered by the keypress. The last entry in the table is indicated by a dummy line of data with a value of 0 for the key. The example below supports two keyboard shortcuts: Control-P and Control-Q.

When an exact match to the keypress is found, the function uses the menu information in the table entry to create an AES menu selection message exactly as though the user had clicked on the menu item. This message is then processed by the code in the main event loop. Disabled ('greyed-out') menu items are ignored.

```
/*
** Listing 2.
** Function to handle the mapping of
keypresses
** to menu events. The arguments are the
key
** pressed, and the shift state, and a
pointer ** to an AES message buffer, into which a
```



fake ** menu selection event is posted. The function ** returns TRUE if the key was successfully

** translated, or FALSE if not, when the buffer ** should be ignored.

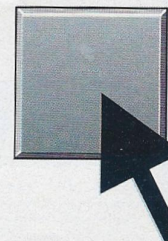
```
/*
** Usage:      match = key_map(key,shift,pipe);
**
**             int key_map(int,int,short *);
*/
int key_map(key,shift,pipe)
int key, shift;
short pipe[];
{
int f;
char **xlate;
static int table[][4] = {
{K_CTRL,'P',OPERMENU,OPERPPOP}, {K_CTRL,'Q',OPERMEN
U,OPERQUIT}, {0,'\0',0,0}
};
xlate = Keytbl((char *)-1,(char *)-1,(char *)-
1);
key = (key > 8) & 0x7F;
key = *((xlate + key); key = toupper(key);
shift &= 0x0F;
if ((shift & K_RSHIFT) || (shift & K_LSHIFT))
shift |= (K_RSHIFT | K_LSHIFT);
pipe[0] = MN_SELECTED;
pipe[1] = ap_id; pipe[2] = 0;
for (f=0; table[f][1] != '\0'; f++)
if (table[f][1] == key && table[f][0] ==
shift)
{
if ((menu+table[f][3])>ob_state & DISABLED)
return(FALSE);
pipe[3] = table[f][2];
pipe[4] = table[f][3];
menu_tnormal(menu,pipe[3],0); return(TRUE);
}
return(FALSE);
}
```

Let 'em Fly adds keyboard equivalents in alerts and much more too.

Oops

Keen-eyed readers will have noticed an error in last month's article - the AES MN_SELECTED message carries its menu selection data in the fourth and fifth words, not the third and fourth. Too much Christmas spirit - hic!

Some of the more advanced interfaces (like those in Interface or Connect) also allow keyboard shortcuts in dialogue boxes. This is rather harder to code in your own programs, as it requires a rewrite of the AES `form_do()` function. As an alternative, check out the freeware program Let 'em Fly, which patches into the operating system to give keyboard shortcuts to all dialogue and alert boxes.





L.A.P.D.

P.O. Box No. 2, Heanor
Derbyshire, DE75 7YP

Telephone or Fax: 01773 761944
or 01773 605010

24 hour despatch on all orders

No waiting around for disks to arrive!

SOFTWARE AT REALISTIC PRICES

PD DISKS: £1.50 each

Budget range PD Disks ONLY £1.00

Same day service, quality virus free disks

PLEASE ADD 50p P&P ON ORDERS UNDER £5.00

Overseas customers (outside Europe) please

add 50p per disk

ALL DISKS BELOW ARE ONLY £1.50
UNLESS OTHERWISE STATED

LICENCEWARE GAMES

- L130 DESERT HAWK Blackhawk helicopter mission game (1mb, £3.00) "NEW"
- L129 BUDGEON ADVENTURES Six additional adventures to supplement the two on disk
- L128 BUDGEON V2 (1mb) Fantasy wargame system for solo or group adventures (£3.00) "NEW"
- L124 SANDS OF MARS Govern and operate a Martian colony (£3.00, 1mb)
- L125 PATHS OF GLORY Explore dungeons, gather treasure, slay monsters, etc! (£3.00)
- L115 DEVON 2 Super fantasy adventure with a overhead view (1mb, £3.00)
- L98 WORLD AT WAR Economic/military strategy world war game (£3.00)
- L93 PROJECT PURIFY Clear space sectors of debris Asteroids style (£3.00)
- L114 TIME MACHINE Travel through time to save the Earth. Over 100 locations (£3.00)
- L112 CRAGHAVEN High adventure in a fantasy world (£2.50)
- L117 FIGHTTANK An avoid and collect game for younger players (£3.00)
- L105 CONQUEST II Bigger, better sequel to the best PD God game (1mb, £3.00)
- L104 WAR OVER THE REICH Take over British Bomber Command in WWII (£3.00)
- L69 BIO-HAZARD Full version of the sci-fi Dungeonmaster clone (1mb, £3.00)
- L22 GRAND PRIX MANAGER Grand Prix management sim. Employ drivers, mechanics, etc., test cars, then race in a full grand prix season! (£2.50)
- L87 STORM 94 (ST) Aliens meets Gaultier for superb blasting action! (order L91 for STFM version) (£3.00)
- L79 DARKLYTE II (1mb) Sequel to the highly-rated Space Crusade type game (1mb, £2.50)
- L41 MURDER ON THE ORION EXPRESS Murder solving game set on an interstellar cruiser (£3)
- L21 DEAD OR ALIVE...? Large, complex and challenging text adventure (£3.00)
- L97 STONE COLD SOBER An adventure game with graphics (£2.00)
- L101 DUNCANS CAP #1 Four super puzzle games Outrageous Fortune, Matchmaker, Frame of Mind and Cryptogram (£3.00)
- L66 HEARTBREAK Highly addictive and challenging arcade puzzle game (£3.00)
- L31 THE CURSE OF AZRIEL Fantasy trading/adventure game (2 disks, £4.00)
- L60 CONQUEST A God game in the style of Populous (£3.00)
- L58 NICE BYTES #1 Gridworld, a word game & Rego, a tile flipping game (£2.50)
- L50 DEMON Fantasy game with 3D view, monsters, magic, teleports, traps, secret walls, etc! (£3.00)

BUDGIE U.K. (only £1.50 each)

- BU.119 FOOTBALL TACTICIAN I The original £19.95 Premier League version of the soccer management game!
- BU.111 INTERNATIONAL CRICKET II Animated 3D game (1mb)
- BU.50 SPACE INVADERS Classic arcade action by Robert Leong
- BU.90 MATCH IT Possibly the most addictive game ever devised
- BU.89 HORSE RACING SIM Quality sim from the sale ring to the track
- BU.30 QUEST FOR GALAXIA The Gsloxiens return to your ST
- BU.70 PACMAN ST The definitive version by Robert Leong
- BU.71 DARK WARS Role play adventure with a 3D view

ART AND GRAPHICS

- A.99 MINIPICS II (1mb) All resolution picture converter and catalogue
- A.103 OFFICE CLIP ART 33 PCX images of office related items
- A.100 ANIMALS CLIP ART Over 170 PCX images of animals (£5 disks/£7.50)
- A.101 ASTROLOGY CLIP ART 36 PCX images covering every zodiac sign (3 disks/£4.50)
- L77 AUTO-STEREGRAM (1mb) Create your own 3D Magic Eye pictures (£3.00)
- A.95 VISUAL ILLUSIONS A collection of 24 magic eye 3D pictures
- A.98 STEREOGRAM ANIMATIONS Now see Magic Eye pictures move!
- A.36 KOZMIC 4 Complete version of the stunning psychedelic pattern creator
- A.1 ANI ST Commercial quality animation program (once cost £60.00 to buy!)
- A.84 GENVIEW Load, view, convert just about any picture format (1mb)
- A.45 CRACK ART Demo version of the excellent German art program
- A.75 POLYFILM by Martin Brownlow. Make films from multiple 3D polygon objects
- A.44 FANTASY SLIDESHOW Spectrum 512 pictures on fantasy theme (over 16's only)
- L26, L27, L28 TYPE WRITE CLIP ART 4 disk sets of quality clip art in IMG format. £10.00 set.

MUSIC

- S.4 YAMAHA PSS Patch editor and facility to print tablature music
- S.144 EKSEQ 1 A 100 track, 240ppm sequencer with many features
- S.145 OPTONIX MUZAK Rip and play music from other programs
- S.8 NOISECRACKER Soundtracker...mod player with eight starter lines
- S.7 ACCOMPANIST 16 Voice Henry Cosh sequencer (full instructions on disk)
- S.19 ALCHIMIE JR. Impressive Swiss multi-window, multi-task sequencer (1mb)

GAMES

- ARCADE
- G.413 COMBAT Fast action military shoot'em up in the style of Operation Wolf "NEW"
- G.405 ULTIMATE ARENA Beat em up in the style of Mortal Kombat (S/W)
- G.403 SQUARE OFF The ultimate tumbling block Tetris game (1mb, STE) 2 disks/£3.00
- G.398 ASTEROIDA (STE) Classic asteroid blasting action - order G399 for STFM vers. (1mb)
- G.400 FRANTICK (STE) Super fast action kinetic combat simulator - order G401 for STFM (1mb) 2 disks/£3.00
- G.410 PACMAN-ON-E (1mb) The classic chase avoid and collect maze game
- G.247 MEGAPEDE The classic blast the caterpillar Centipede game (1mb)
- G.395 DYNABUSTER Bomb laying and dodging arcade game (STE, 1mb)
- G.366 DAVE MUNSIE GAMES 9 games from the master programmer, including Frogger (1mb)
- G.355 WING LORD Aerial duelling game in the style of the classic Joust
- G.380 STARBALL Pinball game - arguably the best PD game on the ST!
- G.381 MAX HELP Max find his girlfriend. A cute arcade platform game (1mb)
- G.333 SUPER PSYCHO KART High speed platform game to rescue piglets (1mb)
- G.286 ROCKFALL SPECIAL EDITION Tunnelling/diamond collecting puzzle game
- G.281 PSYCHO PG Platform shoot em up with Rambo-esque pig. (2 disks/£3.00)
- G.279 OPERATION GARFIELD Frantic Operation Wolf type shoot em up action. (STE)
- G.80 TETRIS & PILE UP Two very good versions of the Tetris arcade game
- G.171 HACMAN II 1 megabyte version of Pacman, 100 new levels!
- G.110 LIAMATRON 100 levels of fast arcade action with wicked sound FX
- G.201 BLATI Tetris style three in a row, falling blocks with many added features

- FANTASY/ROLE PLAY
- G.425 ANORKAS OF DOOM (1mb, 2 disks/£3.00) Fantasy roleplay from a first person perspective "NEW"
- G.431 REALMS OF REALITY (1mb) Dungeon hack & slash in the style of "Dungeonmaster" "NEW"
- G.412 NISHIRAN (1mb, 2 disks/£3.00) Classy sci-fi, first person role play game "NEW"
- G.351 TOWERS First-person view role playing fantasy adventure game (2 disks/£3.00)
- G.308 WALLS OF ILLUSION Ultimate Dungeonmaster clone with Eng. instructions (1mb)
- G.5 MORIA A complex fantasy D&D based role play game. (1mb)
- G.370 MINDMELT Fantasy adventure with an overhead view
- G.343 BUDGEON Solo fantasy adventure using the Budgeon combat system
- G.288 DARKLYTE Space Crusade type droids wargame
- G.262 ALIENS Space Marines v. Aliens strategy combat game
- G.115 MYSTIC WELL Complete Dungeonmaster style adventure game

- PUZZLES
- G.404 MEMORY RECALL (1mb) Challenging memory test with digi pics & sound
- G.387 SPACESWEEPER A challenging Minesweeper game in three dimensions!
- G.315 SKILLS Addictive up to date reworking of Landmines/Winefield (1mb STE)
- G.311 JIGSAW A computerised jigsaw puzzle (1mb)
- G.269 QUIZMASTER Multi-choice answer general knowledge quiz (STE)

- ADVENTURES
- G.411 ROBOT REVOLT A SCI-FI TEXT ADVENTURE "NEW"
- G.394 THE SECRET PARK A text adventure with graphics for children
- G.225 CALYVORN D&D type fantasy adventure set on a far earth-like planet
- G.321 INVESTIGATION (2 disks/£3.00) Graphic adventure in the style of Sierra On-Line
- G.200 ANARCHY ACADEMY 3D graphic adventure to blow up the school!
- G.140 A NIGHT ON THE TOWN An adventure with the opportunity to meet the girl of your dreams and...well, the rest is up to you
- G.222 GRANDAD AND THE QUEST... 3D graphic adventure by Ian Scott. S/ware (1mb)
- G.303 GRANDAD AND THE SEARCH FOR THE SANDWICHES Graphic adventure. (1mb 2 disks/£3.00)
- G.156 THE AWE CHASM An adult adventure featuring Snatch and Crunch (over 18's)
- G.167 SUSAN An adult adventure (over 18's only)
- G.91 QUEST FOR THE HOLY GRAIL Pythonesque madcap humour
- G.202 UNKUNJUAN UNDERWORLD Highly rated large scale text fantasy adventure

- STRATEGY & OTHERS
- G.412 WAR (1mb) Wargame construction kit with several scenarios "NEW"
- G.414 STELLO A computer version of the Othello/Reversi board game "NEW"
- G.131 STAR TREK - THE GAME Defeat the Klingon threat to the galaxy. (1mb)
- G.386 STAR TREK - KLINGON WARS A starship Enterprise battle simulation. (1mb)
- G.390 INTERNATIONAL MANAGER European Nations/World Cup management game
- G.391 ANCIENT GAME OF GO 2 computer versions of the Oriental game (Gnugo, Amigo)
- G.344 CHESS-MATE A Chess/Draughts game analysis tool
- G.332 CAESAR Strategy game set around the Mediterranean in 200BC (S/W)
- G.330 GNU CHESS French chess playing program for all levels
- G.388 STRATEGEM Two player strategy world war game. (2 disks/£3.00)
- G.329 PEGASUS Space strategy game. Seek and colonise planets (1mb, 2 disks/£3.00)
- G.287 THE COARSE ANGLER Angling simulation game. (1mb)
- G.237 CHAOS Madcap game of battling wizards by Martin Brownlow (1mb or .5mb)
- G.324 IMPERIAL CONQUEST Complex ancient Mediterranean game of conquest (S/W)
- G.325 SOCCER MANAGEMENT A complex simulation of soccer management (S/W)
- G.217 THE MAZE 3D adventure game loosely based on The Crystal Maze
- G.173 PENGUINS Move your penguins around the screen lemming fashion
- G.10 VEGAS Roulette, poker, blackjack and slots... without the Nevada sand!

UTILITIES

- U.77 THING (1mb) An impressive alternative desk top
- L111 SUPER HACKER Replace a picture in almost any game or demo with your own! (£3.00)
- U.67 ST TOOLS An exhaustive collection of Atari ST utilities
- U.53 TERADESK V1.36 Replacement desktop for the ST/STE (1mb)
- U.20 FASTCOPY 3 Excellent disk copier for cover disks
- U.48 PREMIER PACKERS 13 of the best program packers, plus a de-packer
- U.42 PICTURE HUNTER Rips picture screens from other programs
- U.66 BEFORE DAWN Animated screen saver that will use your own animations
- U.47 PROBE ST Handy utility. Grabs music/graphics, disk/memory editor, etc
- U.52 VAULT & TURTLE Fast hard disk back-up utilities

PROGRAMMING

- P.44 GFAY 2 Full version of language with tutorial & compiler! (NB. This disk is not PD - L.A.P.D. have permission to distribute it)
- L.68 SPIRIT WORKS New commands for games writers using GFA V3+ (2 disks/£7.00)
- DS1 SOZOBON C A complete C compiler with documentation
- P.24 MENU-MAKER Make your own menus with music, sprite and scrolling message
- P.33 ZX SPECTRUM EMULATOR Emulate the old Speccy on your ST/STE (1mb)
- P.17 68000 PROGRAMMING COURSE 10 How to do it document files
- P.19 GFA EXPERT Massive text file and help routines for GFA-Basic 3.0
- P.16 C ADVENTURE TOOL KIT Write professional quality adventures in C

MISCELLANEOUS

- M.177 LOTTERY COMPANION Valued assistance with your lottery entries "NEW"
- L103 LEXICON The ideal program for word game fanatics. Solve crosswords, anagrams, etc! (£3.00)
- L111 SUPER HACKER Put your own picture into demos, games, etc! (£3.00)
- M.146 AWARD MAKER Design and print award certificates
- M.155 ROUTE FINDER Route finding program for England, Wales and Scotland
- M.161 THE GARDENER A special database for gardening enthusiasts
- M.175 FISHERMANS DATABASE The ultimate record program for the keen angler
- M.19 AIR WARRIOR Flight sim with World War II aircraft
- L.17 ADDRESS BOOK Neat and easy to use database for names and addresses (£2.50)
- L.18 CIRCUIT Easy to use electrical circuit diagram producing program (£2.50)
- M.93 STITCH MATRIX Pattern making program for knitting machines
- M.111 NORTHERN & EQUATORIAL STAR Atlas Superb serious astronomy program S/W
- M.77 THE BIBLE King James authorised version. 3 disks/£4.50
- M.76 FORM-FINDER Proven horse race analysis and prediction program
- M.81 NEWSDISK Construct your own newsletters and magazine disks
- M.100 GERMAN TRANSLATORS Three programs to translate German text to English
- M.26 GENEALOGY 2 programs for the family historians to trace their forebears
- M.5 YOUR SECOND ATARI ST MANUAL Text files to supplement the official manual
- M.17 WORD PUZZLE Stuck with word games? Then this disk may help
- M.30 EXTRA WORD LIST 70,000 extra words to use with disk M17

BUSINESS

- W.24 EASY TEXT Desk Top Publishing at a budget
- W.21 MARCEL Super word processor with built in spell checker
- M.106 ACCOUNTABILITY Fully featured accounts program. 10 accounts, 2,000 transactions!
- M.148 INVOICE MASTER Excellent invoicing system for small businesses
- M.13 ORUS 2000 A superb spreadsheet program (1mb)
- M.83 INVENTORY PRO A stock control system
- U.23 DOUBLE SENTRY Impressive accounts package for the small company (no VAT)
- U.33 FAST BASE A powerful and flexible date-base
- W.3 FIRST WORD Word processor that set the standard for others to follow

EDUCATIONAL

- L.20 SUPER SPELL Teaching games for the 4 to 9 year old (£2.50)
- L.37 SUPER RUN More teaching games for the 4 to 9 year old (£2.50)
- G.265 WITCHES, MICE & FAIRY TALES Games for younger users
- G.83 NOAH'S ARK Collect the animals, two by two - addictive for adults too!
- M.95 ABOUT THE HOUSE Excellent collection of programs for young children
- M.28 KIDZ EDUCATIONAL Alphabet, Math Test, Numerical-Go-Round & Number Maze
- M.37 KIDZ DISK #1 Colouring Book, Spell Pic, Word Pic and Flash Card
- M.42 KIDZ DISK #2 Dot to Dot, Keyboard Capers & Matching
- M.67 BODY SHOP Graphic quiz type human anatomy tutor
- M.104 SOLAR SYSTEM GEOGRAPHY Effects of the sun & moon, on tides, seasons, etc
- M.16 KIDZ COMPILATION Kid Graph, Grid, Music, Notes, Piano, Publisher, sketch and story...all on one disk!
- PRO.27 EARLY LEARNING MATHS 2 by Philip Rankin for 9-12 years
- L.01 ROBOT MATHS Maths tutor for children aged 6+ (£2.95)
- L.02 MOON LETTERS Spelling game for ages 5+ (£2.95)
- L.04 ROBOT WORDS Hangman in a modern format (£2.95)
- L.08 ALL BLOCKED UP Mathematical puzzles for the young (£2.95)
- L.10 DROP DOWN WORDS Spelling/memory game for youngsters (£2.95)
- L.12 MATHS FUN Maths for children 4 to 7 years (£2.95)
- M.20 G.C.S.E. STUDY AIDS Help with Algebra, Trigonometry and Geometry
- M.1 PLANETARIUM Excellent, easy to use, astronomy program
- M.153 WORLD WAR II Home front study pack for Sec. school work (3 disks/£4.50)
- M.7 HISTORY FILE Investigate a historical murder in a Scotland (3 disks/£4.50)
- M.86 DEATH OF A PRESIDENT Investigate the Kennedy assassination (3 disks/£4.50)
- M.114 FRANGLAIS 3 & 4 French language tutor programs
- M.123 CIA WORLD FACTBOOK Facts and figures on countries. (4 disks/£6.00)
- W.22 HOMEWORK A word processor for the younger user

COMMUNICATIONS

- L.113 BBS DIRECTORY Money saving directory of UK BBS's (£5.00)
- C.22 TEDDYTERM A superb multi-function communications program
- C.7 VANTERM V.4 Excellent multi-function comms program
- M.138 MORSE CODE TUTOR Practice and perfect your skills
- C.24 OFF-LINE READERS Four offline reader programs

BUDGET PRICE DISKS only £1.00 each

- B.45 FIGHTING SAIL Naval battles
- B.51 COSMOSAL GAVE The original adventure
- B.39 ASTEROIDS A loving restoration
- B.15 ROLL N' NUDGE Fruit machine
- B.20 HACMAN Pacman action
- B.36 8 BALL POOL Bar game simulation
- B.27 FROGGY The arcade classic
- B.50 STAR TREK - Save the Federation

AUTHORS

As a leading PD, library for the Atari ST and Falcon computers we are always seeking to maintain a catalogue of the very best and newest titles around. If you wish to get maximum distribution for your work either as PD, Shareware or Licenceware then please send us a copy to the address above. We respond to ALL submissions and enquiries

FREE CATALOGUE

For a FREE copy of our latest, user friendly, catalogue disk just send a blank disk and s.s.a.e. to the address above and we'll send you one by return complete with a selection of quality PD. Alternately send us £1.00 and we'll send you the same catalogue and free programs on one of our disks. (Please quote SW1)



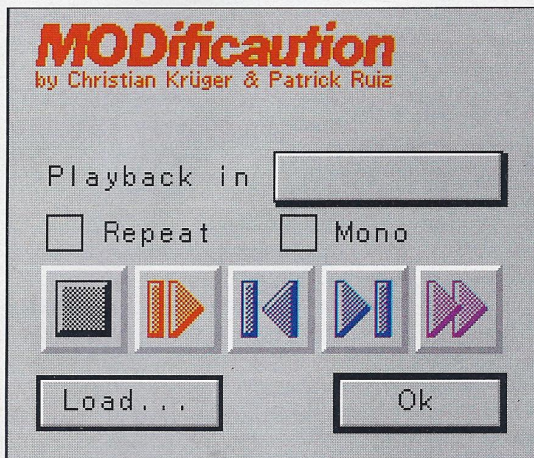
PRINTED CATALOGUE

now available, listing hundreds of PD/Shareware/Licenceware titles. Only £1.00 including P&P or 50p if ordered with disks. Please state if you have a Falcon. Please make all cheques/postal orders payable to L.A.P.D. Credit cards welcomed.

Public Arena

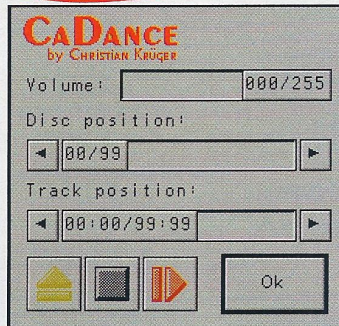
NEWS Exclusive

Last month we reported Space had been built-into Freedom 2 and we've got two exclusive screenshots of two of the first eCPXs (from a RSC editor). MODification is a eCPX 4 track module player which supports the



Paula protocol which means can be called from inside other programs.

Freedom 2 will be created using (yet another) resident system library called Liberty. The library will be freeware and include AES call redirection, basic system independent audio calls with different sound drivers, advanced graphic functions (scaling, dithering, loading etc),



CaDance is an eCPX Audio CD-ROM player.

advanced GEMDOS like functions including functional ACC malloc, memory manager, buffer load function with support for compressed files.

TurboBlanker, the Falcon only screensaver and accelerator, has been updated to v1.40. Along with a few minor bugfixes this version has been updated for compatibility with MagiC 4 - all we need now is MagiC 4 to run with it!

DanSoft BBS, 9-12pm on 01524 732957 has announced an Easter cube giveaway! At Easter the most frequent caller to the BBS in 1996 will receive a mystery cube.



Vote of confidence

On behalf of all the contributors to Public Arena thanks for the vote of confidence at the recent Atari World shows - it's nice to be appreciated!

One of (many) topics debated was the importance of MagiC Mac and PC emulators to the Atari scene. From my discussions with (mostly) German software developers it's clear a percentage of them are developing Atari software using MagiC (on Macs) at resolutions of 800 by 600 in colour. This is great for Falcon owners but not such good news for ST owners as some of these programmers are dropping medium resolution support. Of course the lure of programming native Mac apps will claim some developers but with a bit of luck we'll also get a payback with some Mac software being re-invented on the Atari platform.

The non-commercial scene has traditionally been a rich source of utilities but as commercial developers of major applications fade away they must be replaced or people will inevitably drift to other platforms.

Having overcome the withdrawal of Atari itself we can afford to be optimistic about the future of TOS based computing - but don't think we can afford to ignore any TOS compatible machines.

Joe Connor

jconnor@cix.compulink.co.uk

All the software (unless otherwise stated) can be sourced from:

Floppyshop 01224 312756

Goodman 01782 335650

LAPD 01773 761944

Merlin 01452 770133

Power PD 01622 763056

Bootmenu v2.15

Freeware • All Ataris



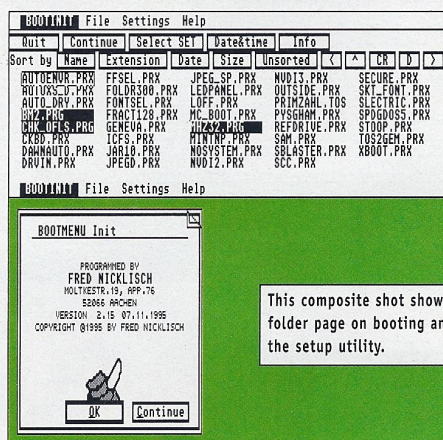
After years of choosing between XBoot (commercial) or Superboot (Shareware) there are now several

non-commercial boot managers to choose from. Some feature a single Auto folder application but most, Bootmenu included, use a run time Auto folder program alongside a separate setup application.

Bootmenu is flexible, by default it handles Auto and desktop accessories but can easily be configured to handle other file types such as Control panel extensions (CPX), desktop INF files etc.

One of the best reasons to use a boot manager is to create different setups for specific tasks. Using BootINIT the active programs can be saved to a SET file.

On booting the Bootmenu screen appears and using the mouse or keyboard you can flip through the individual pages (each filetype has



This composite shot shows the Auto folder page on booting and BootINIT, the setup utility.

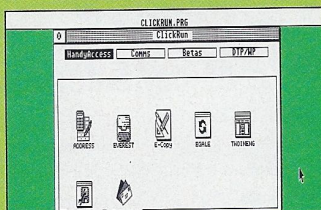
its own screen) activating or disabling files as desired. On selecting an entry in the Sets screen each page is processed. It's still possible to fine tune your selections before exiting Bootmenu before finally exiting to continue the boot sequence. Setting up using BootINIT required some experimentation but once setup Bootmenu is flexible and easy to use.

JC



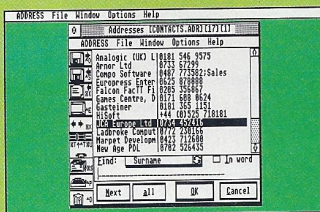
ClickRun v1.2

ClickRun is a Shareware program launcher which displays icons, using any standard icon RSC file format, in 'Group windows'. Programs are added using a separate setup utility which sets up 'aliases' to call the 'real' program when selected. Group windows are a convenient way to group together frequently launched programs without wading through the clutter of ancillary files to find the one to click on.



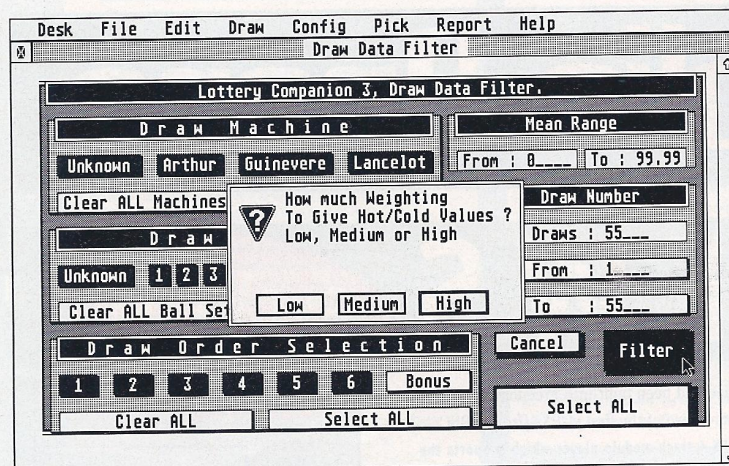
Address v2.04

Address is a name and address manager offering comprehensive import • export options. This latest release features two minor but useful new features. A right mouse click displays a small popup offering Cut, Copy, Paste and Dial options for the selected field and the number of selected records is now displayed in the title bar of the main window. A stand alone auto folder birthday alarm which reads standard Address ADR files is now also included.



ToDo v1.0

ToDo is a shareware electronic notepad which runs as a program or accessory and offers an alternative to sticking small sticky yellow squares all round your monitor. In contrast to other electronic notepads ToDo can group notes into categories and assign a priority to each note. Editing, deleting and ticking off notes is easy despite the main program being German, an English version will be made available if there's enough demand.



Yet more configuration options for your reports or for picking your numbers in the Draw Data Filter dialogue.

Lottery Companion v3.0



Shareware • All

Ataris

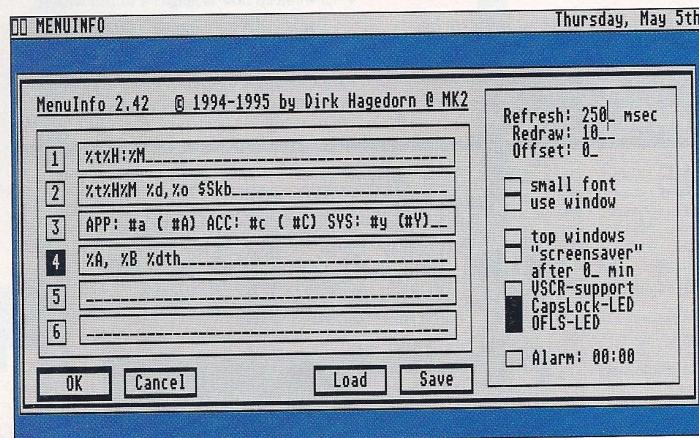
Mark Butler continues to develop Lottery Companion at breakneck speed. This major new release includes better hardware support along with an improved user interface. Support for Overscan and Falcon resolutions are welcome as is the saveable

configuration file, which includes an option to turn off the help text, resulting in faster screen updates. The menus have been reorganised with additional options added to several dialogues, notably the report and printing dialogues. The Draw data filter dialogue allows you to select any range of weeks, ball • machine combinations etc for screen or printed

reports in addition to the Wheel dialogue for selecting your numbers. Extra reports have been added and new information included in the headers for increased clarity.

Finally, all the text and help files have been thoroughly overhauled with some interesting information from the official Lottery Web site.

The unregistered version cannot update the history files and displays a shareware reminder screen but with registration at only £5 minimum everyone can afford to invest in a copy. On-line users can even receive each week's lottery data by email! Future plans include integrated syndicate management features along with even more reporting options and (hopefully) keyboard shortcuts.



Up to six configurations can be stored in memory.

screen. With the help of the configuration program you can have MenuInfo display what you want, and how you want it: in different system fonts (large or small text), or within a floatable window bar.

MenuInfo shows the CapsLock key status using a small LED. Another LED is shown if you have Kobold installed indicating whether any files have been opened.

MenuInfo v2.42

Fairware • All Ataris



Atari in all their wisdom left the top right hand corner of the screen empty.

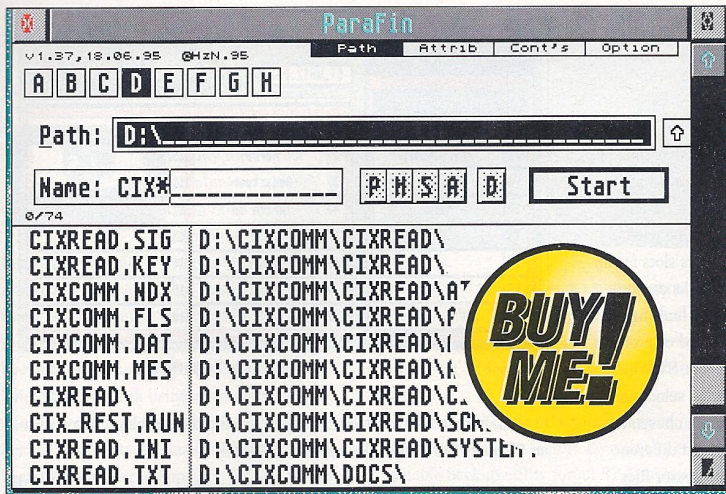
Some programmers took advantage of this space to show certain information when running their programs. MenuInfo is the latest in this genre. It is a small utility which shows lots of user-defined information in the unused corner of the

Time and date can be displayed in various formats and it can show all sorts of system information such as free memory and mouse co-ordinates.

A nice feature of MenuInfo, where other similar programs fail is it doesn't display any information when a screensaver is active. If you want virtual resolution you normally have to scroll to the upper right corner to see the menu bar. MenuInfo has VSCR support which means that the menu bar will be displayed in the current part of the virtual screen. There are even more features... it gives you a X-Windows style autotop for windows and provides the ST with a screensaver. All this in only 45Kb of memory!

Many other features are covered in the documentation. Registration costs £6.





ParaFin v1.37

Shareware • All Ataris



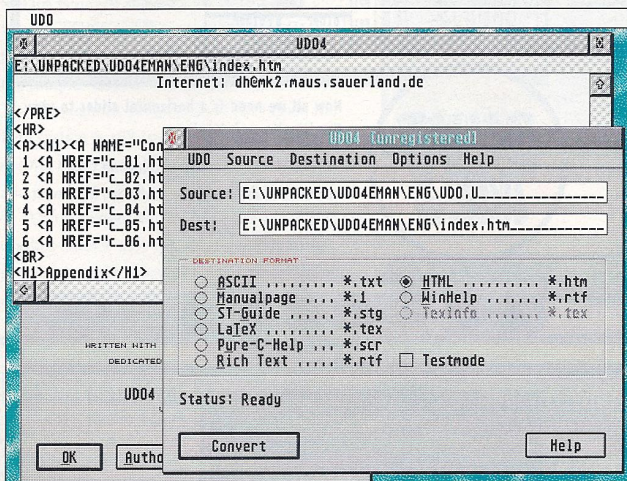
ParaFin, or Parallel Finder is a background file searching utility which will be mainly handy for hard drive users. It can search on several drives and recursive paths for files given enough search parameters. You can use it as either a program or an accessory with the latter letting you

It all looks a bit daunting, but the documentation explains everything quite well.

ParaFin supports the AV-Protocol, so any files resulting from the search can be executed by double clicking on them. The window can also be iconified or even placed behind other windows without interrupting the search! What's more those of you who use MinixFS under MultiTOS can take advantage of long filename compatibility.

ParaFin is now available in English and knocks the socks off any of the competitors. Registration is a mere \$6 and for something this powerful you can't complain.

DB



UDO v4

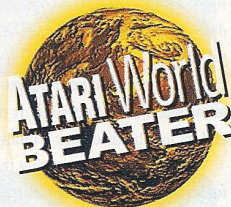
Shareware • All Ataris



UDO (Universal Documentation) converts files from UDO syntax into various other formats: ASCII, ST-Guide, LaTeX, Rich Text Format, Pure C Help, Unix Manual Page, HTML and Windows Help. This is a Godsend for programmers who need to provide documentation in various formats. It not only saves time but the hassle that comes with writing specific source for each format.

You can use UDO in its command line

UDO - Universal documentation at the touch of a button.



mode or as a GEM program. It is recommended you use UDO in its GEM form as this offers much more in features than the command line version. As well as converting the source file, the GEM version lets you call an editor, a

viewer and even a specific program for the destination file.

UDO is very easy to use. Select the UDO source, the destination format and then go. Everything is done at high speed. It even implements the modern GEM interface standards of Drag&Drop, VA-Protocol, non-modal dialogues and iconify. Conversions run in the background and the main dialogue can be iconified during this process.

All UDO source code commands are covered in detail. UDO itself is available on other platforms: DOS and Linux, with all commands the same across the three platforms.

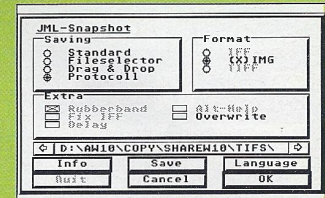
Registration is \$15 for private users removing nag boxes, time delays and some limitations. So if you want to create documentation in various formats, be it for your own web pages, UDO is one you can't afford to miss.

DB



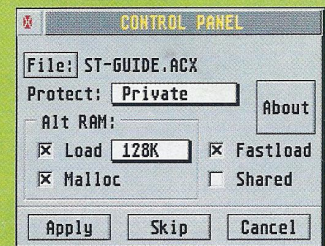
JML Snap v3.0

JML Snap is a bilingual (German • English) Shareware snapshot program. Screenshots can be grabbed in IMG, TIFF and IFF formats using the rubber band and entire screen options or (more interestingly) a GEM window and contents or just contents ideal for reviewers everywhere. Registration costs £12 which activates the TIFF • IFF and window grabbing options.



ProgInfo v1.7

This cute CPX is designed to check and modify program flags. It's ability to toggle the Fastload bit on • off is reason enough to keep a copy in your CPX folder. To techies running MultiTOS, MiNT (but not MagiC) or anyone using alternative RAM ProgInfo offers complete control in a convenient package.



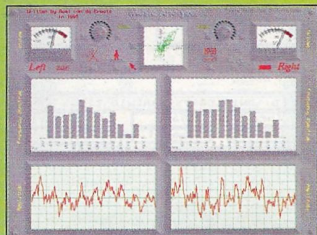
Playback v1.10

Playback is a standard MIDI file player, which runs on all Atari computers with 0.5Mb memory in at least medium resolution. It allows you to alter the output in a number of ways. Besides the filter options, you can change the volume and transpose MIDI channels, add program changes and alter the tempo.



Music Analyzer revision 5

Music Analyzer can be described as a frequency spectrum analyzer. It takes the signal from the microphone input of the Falcon, and produces two 14 band spectrums, two VU meters and one right versus left oscilloscope. The latest update is more accurate than the previous versions and it adds a new oscilloscope mode. Beautiful design and good support makes it well worth having around.



Alesis D4 Drumset Editor v3.0

This shareware editor allows you to edit and modify the Alesis D4 drum module. Virtually anything on the D4 can be edited using this utility which supports all 21 drumsets, program tables and trigger setups. It runs in any two colour mode (ST high resolution or higher), and costs \$25 to register.



Atari Explorer Online Volume 4 Number 9

A great way to start the new year is with a copy of the highly acclaimed on-line magazine AEO. The latest issue released on 1 January is a 230Kb text file with news on everything Jaguar. Of interest to the rest of the Atari population is the Unabashed Atariophile section with no less than 100 reviews of PD and shareware software!

ST Whiz v2

Freeware • All Ataris



ST Whiz is a program launcher that runs in ST medium or high resolution. Based around nine banks, each storing 16 programs, it offers slots for up to 144 programs in all. Extra banks can be loaded in case you find 144 slots limiting!

Parameters can be pre-defined or prompts for a filename via the file selector. ST Whiz also provides a unique document selection dialogue where a filename can be chosen from a list of files built from up to eight different paths - very useful for word processor files stored in different directories.

Unfortunately ST Whiz is a memory hog and other programs and accessories can't find any memory to run in. Using a utility such as



ST Whiz - a solid performer.

Fractal, bundled with Selectric, can get around this problem. If you own an ST and a hard disk take a look at ST Whiz.

DB

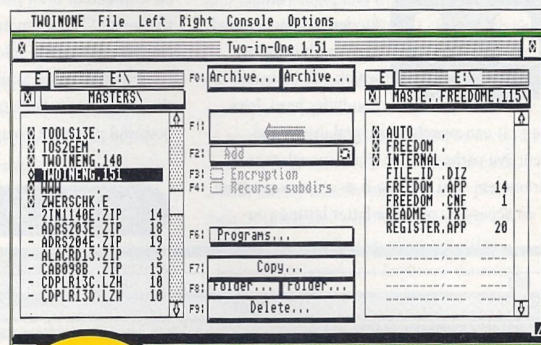
Two-in-One v1.51



Two-in-One is a popular archive manager. This version is a major upgrade over the previous release with several significant new features along with a few bugfixes.

The drive buttons, previously located down the left and right hand edges of the main dialogue has been moved to popups to make room for display of the (optional) filesize and date alongside the filename. Unfortunately you'll need a resolution of 800 x 600 to see all the attributes - maybe the next version will allow alternative font support or horizontal sliders for the directory windows.

Previously after entering then exiting a folder the directory list returned to the top, in this version the slider position is remembered which is a real productivity improvement.



Now all we need is a horizontal slider to view the filesize and date!

Directory listings, including the contents of folders inside archives, is now possible.

JC

McFli v0.7

Shareware • All Ataris



McFli is an animation player which currently supports the FLI, FLC and GL formats although support for other formats is under development. McFli runs on any TOS compatible computer in 256 colour modes which means you'll need a graphic card in your ST or a Falcon, MagiC Mac or Atari PC emulator.

Playback control via a typical video style row of buttons works as you'd expect with an options dialogue for look after the nitty gritty. Animations can be displayed in a GEM window or centred full screen and may be run direct from disk or loaded into memory - if you have enough.



Play animations but only in 256 colours - it's swings and...

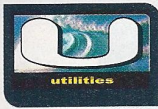
The playback speed can be set to maximum if you feel the need for speed or a 'my computer is faster than yours' session. Multitasking, iconify, Drag&Drop and AV support support complete the picture although I'd like an option to protect the first sixteen colours of the palette so the desktop and dialogues don't keep changing colours.

A full English version is planned, although currently only brief English documentation accompanies the German version - one to look out for.

JC

Bootsave v1.01

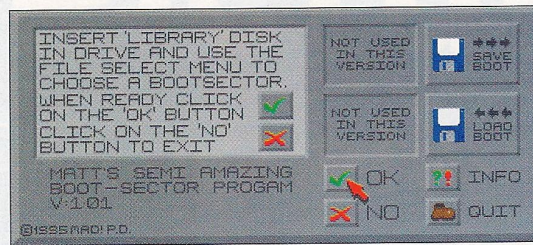
Postcardware • Any ST



Bootsave is a small utility to save the contents of a floppy disk boot sectors as a file. This is useful

because some software, typically games, stash program loading and other code in the boot sector so they run automatically when you turn the computer on. If the boot sector becomes corrupted, or you accidentally 'immunise' the disk using a virus utility, BootSave can restore the boot sector by loading the previously saved file and writing it back to the damaged floppy.

Bootsave is easy to use, feed in the disk containing the boot sector, select Save boot and using the custom file selector set the desired drive and filename. To restore a boot



Save your boot sectors using this cute STOS application.

sector to a damaged floppy simply reverse the process using the Load boot option. After successfully restoring a boot sector 'Operation completed' is displayed and the main menu is restored.

If you're disciplined enough to maintain a library of your boot sectors BootSave is a valuable backup utility for all ST gamers.

JC



PlayIt! v0.2a

Freeware • Falcon only

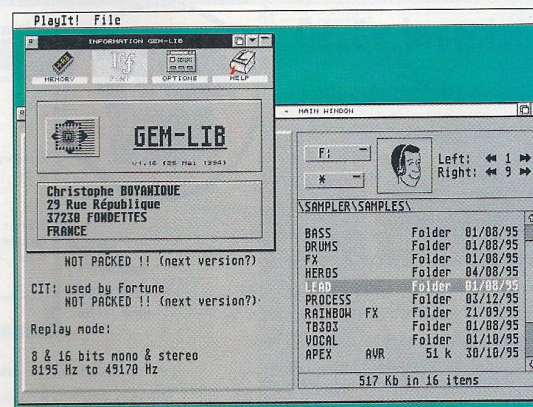


PlayIt! is a sample player written by French programmer Christophe Boyanique (of Bitmap View III and

Sha'uri fame). It supports the Atari (AVR), WinRec (DVS) and Fortune (CIT) sample formats, and only runs on Falcons (it replays the samples directly from disk).

Although the program itself is English, the help system is still entirely in French but despite that PlayIt! is very easy to understand and get along with.

Unfortunately, this early beta version crashes occasionally but let's hope this early promise is fulfilled because there are no decent Atari sample players in the public domain. CL



An early beta of a new French sample player.



Picture Music v1.2

Shareware • All Ataris



Picture Music is an odd little composition tool which converts a picture into MIDI music! It's written by

Gareth Jones, and runs only in low resolution.

First of all, you define four areas of the picture then assign a MIDI channel and set the scale and transpositions for each area. Whenever the pixel colour changes within the area, a new note is generated. Picture Music supports the commonplace Degas and NeoChrome picture formats.

The full registered version shows off with support for MIDI files, GS • GM settings and the ability to run in high resolution. Why not create a colourful fractal or render a scene in your raytracing package, and try them out with



A picture says more than a thousand... eh, MIDI notes?

Picture Music? Picture Music definitely won't compose that top-ten chart hit for you (no matter how colourful or beautiful your pictures are!), but it can give you some inspiration and useful ideas.

CL

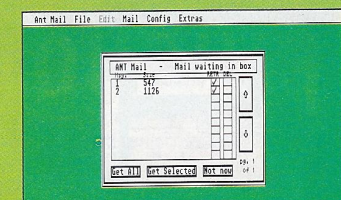


The CyberSTrider Files

I am always being told my Atari is useless because there is no software available. It is easy to get that impression after touring the town centre but a glance through a shareware • PD library catalogue or online listings paints a different picture – the non-commercial Atari scene is buzzing!

The Internet Access Pack has been updated several times already, HTML Browser has been renamed to Crystal Atari Browser. CAB v1.0 has been rewritten with improved cache management and text parsing routines along with new reload option, support for forms and a whole host of features which provides much closer compatibility with NetScape, the dominant WWW browser on other platforms. This means CAB can read more documents which include NetScape enhanced features and is great news for Atarian surfers everywhere.

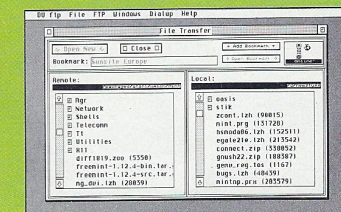
Also bubbling under is a POP3 mailer for STiK, called AntMail, which can send and receive email, and another program, called DUFTP, which makes it possible to grab files from the internet using the file transfer protocol (FTP). Currently Antmail is in beta and DUFTP only runs under MintNet although a STiK compatible version is planned.



A mail program for STiK.

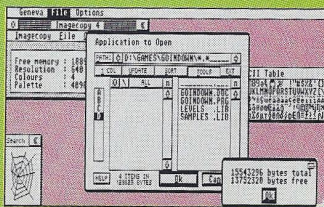
Zorg has been updated, with changes to interface elements, and it is slightly faster than before.

Easy-PGP has jumped a few version numbers. The latest release is fully in English. Keys can be locked and unlocked, and a few more options are available.



DUFTP - Currently available for MintNet and soon for STiK. DUFTP - Currently available for MintNet and soon for STiK.

The CyberStrider Files



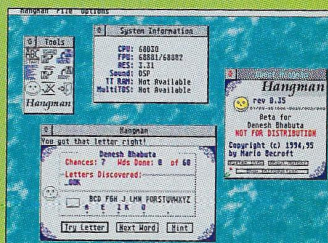
Multitasking at your fingertips with Geneva.

Geneva, the multitasking operating system is up to v4. There is a demo version available which enables the nice features to be explored without the limitations of the demo spoiling the fun.

There has been a surge of Falcon games on the 'Net. Two shareware games stand out: Pac Them (A Paeman clone) and TankBlaster (A Dynablaster clone). I also received an pre-release version of a shareware Hangman game which features a modular GEM interface, includes some cute sound samples and includes a built-in word editor. The final release should work on all machines. It's nice to see classic games still offer great playability.

Dhenesh Bhabuta

dbhabuta@cix.compulink.co.uk



A classic game wrapped up in the latest technology.

FatSound v1.6

Postcardware • Falcon and TTs only

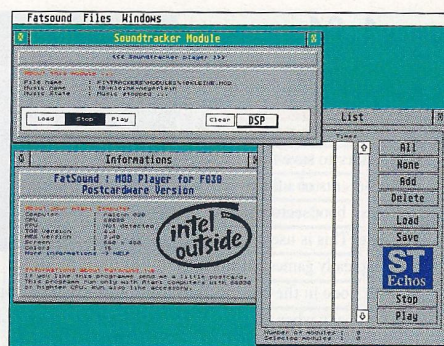


One of the latest module players in the public domain is FatSound. It's written by French programmer

Christophe Cordonnier and runs on all 68030 (or higher) based Atari computers. It supports the replay frequencies 12, 25 and 50kHz. At 50kHz the quality is excellent and if you have a Falcon its DSP chip can be used to replay modules at that frequency.

FatSound runs either as a stand alone application or as a desk accessory, and takes up around 190Kb of memory.

FatSound supports



FatSound runs on all 68030 based Atari computers

playlists, and offers a useful playlist generator, which searches your drive • s for any files with the MOD extension.

On the whole, FatSound is a slick module player, actively supported with frequent new releases. If you have a Falcon or a TT, FatSound deserves a closer look.

CL

Backward v3.10

Shareware • Falcon only



Backward is a ST emulator for the Falcon. Why on earth would anyone

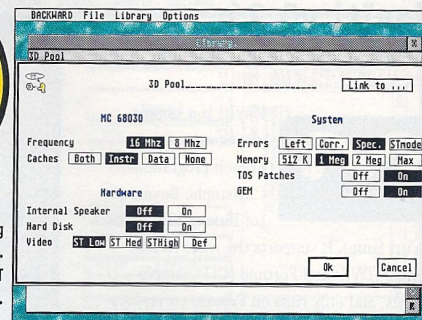
want to make their Falcon ST compatible? Put simply, it lets Falcon owners access a large number of the excellent ST games which would otherwise be attracting flies in a rubbish tip somewhere.

You run the program, make a few configuration changes and bring your old ST games to life. Being memory resident you can alter the set up via keyboard shortcuts. It even comes with it's own desktop to launch programs with.

Backward is quite easy to use and comes with comprehensive documentation. The



Going backwards.. emulate the ST on a Falcon.



preset configurations also give a good idea of how the program works. The unregistered version provides 20 preset configurations and the £12 registration fee brings extra ones. The full version lets you store up to 2000 presets! So, if you want to run your fave ST game on the Falcon, get this.

DB

Movie Player

Freeware • All Ataris

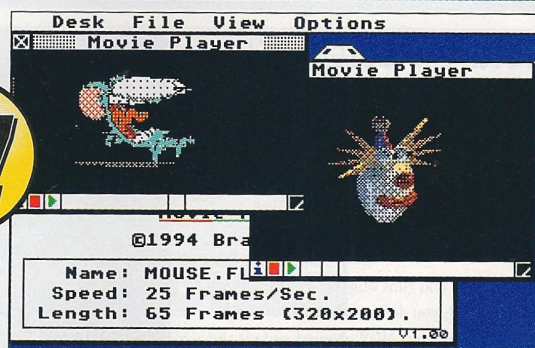
If you visit computer showrooms



you will have seen PCs running endless animations: mostly created by a

program called Autodesk Animator. Movie Player lets you play them from your humble ST.

Movie Player can be run as an accessory or a program and displays most .FLI and .FLC animations in GEM windows. A nice feature is you can play several files simultaneously when running it as an accessory under Single TOS. It is multitasking friendly, although I found features such as Clipboard, Drag&Drop and iconification did not work under MagiC 4 and only worked under MultiTOS! The interface is



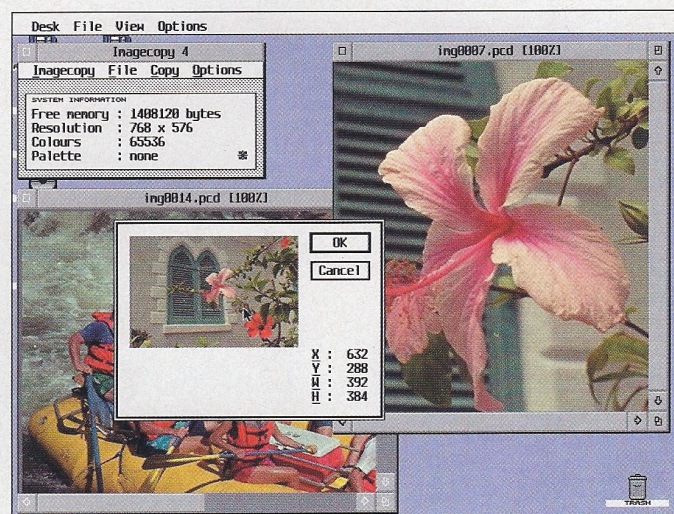
Movie Player - a GEM program but nippy even on a ST in 16 colours.

simple and sweet, with a progress bar display and the customary stop and play buttons. Movies can be resized in real time too!

If you have CD fulls of FLI and FLC files then look no where else: Movie Player is one to play them with.

DB

Have your **Pictures** just how you want them



If you want to capture, view, convert, or print images on your Atari computer then you need Imagecopy. All major image file formats are supported, and images can be printed in monochrome or colour on all popular printers: 9-pin dot matrix to 720-dpi inkjet printers.

Two of the major new features in version 4 of Imagecopy are Page Layout and *Catalogue*.

The Page Layout facility allows multiple images to be arranged on a page using the mouse or by typing coordinates. Individual images can have their own colour settings, and can be freely moved and resized (as in a publishing program). This option can also be used to do colour DTP work by overprinting output from a monochrome publishing program, or you can use text images from Textstyle to create greetings cards or posters.

The interactive screen *Catalogue* feature displays thumbnail miniatures of images which can be clicked on to view, print, or convert the original images.

For an exhaustive list of the features in Imagecopy 4 - and for details on other versions of Imagecopy - just phone our 24-hour catalogue line on 0115-945-5250 and ask for a copy of our 24-page Product Catalogue, or if you prefer you can mail us your name and address.

Prices

Imagecopy 4: £34.95
Imagecopy 4CD: £39.95

Upgrades

From Imagecopy 3.5: £ 6.95
From Imagecopy 3.5: £ 7.95
From Imagecopy 3.5: £17.95
From Imagecopy 3.5: £22.95
From Imagecopy 3.5: £24.95

For upgrades please return disk 1, plus CD disk if applicable. Textstyle is supplied free with Imagecopy 4; add £5 to receive a copy of Textstyle with an Imagecopy 4 upgrade. Add £5 to the upgrade price if you want to upgrade to Imagecopy 4CD from a version of Imagecopy other than 3.5CD.

FaST Club

For users of Atari ST & Falcon computers

7 Musters Road - Nottingham - NG2 7PP
Tel: 0115-945-5250 - Fax: 0115-945-5305

Imagecopy 4

The ultimate Image utility for Atari computers

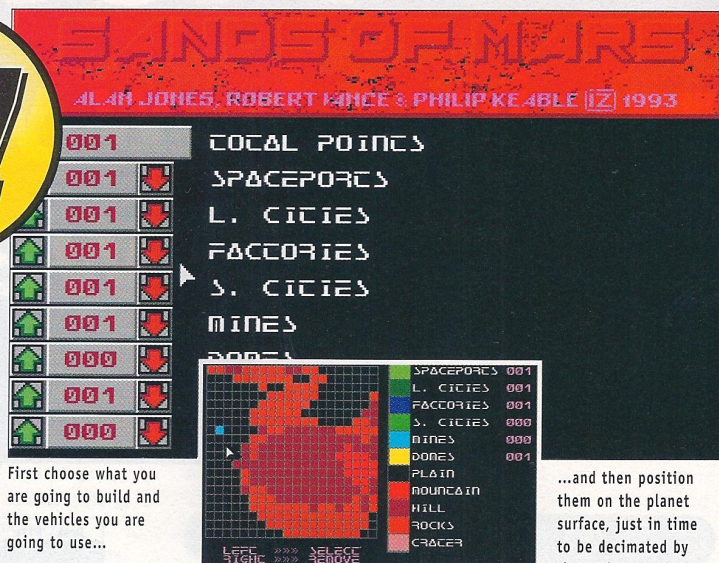
Nial Grimes finances another expedition into the magical, mystical and altogether magnificent world of public domain games...

Sands of Mars

LAPD • £3.00 • Any ST



The year is 2147 and Earth has been largely stripped of its precious metal resources. In an effort to keep up with demand, a new branch of Earth Mining Inc. is opened on the red planet, and you have the daunting task of managing the concern – essentially, we're talking about a war game without the blood and guts here. The overall aim is to make an obscene amount of money while keeping the colony as happy as possible. That involves meeting quotas without too much waste and fending off Martian attacks. The skill level of the computer and growth rate can both be adjusted to raise or lower the difficulty of your task. Fortunately you can save at any point, so with a little forward planning you can step back a few days and avert major disasters – isn't hindsight a wonderful thing? Although complex by nature, Sands of Mars is quite playable in a megalomaniac sort of way; "Mars is mine I tell you, mine!"



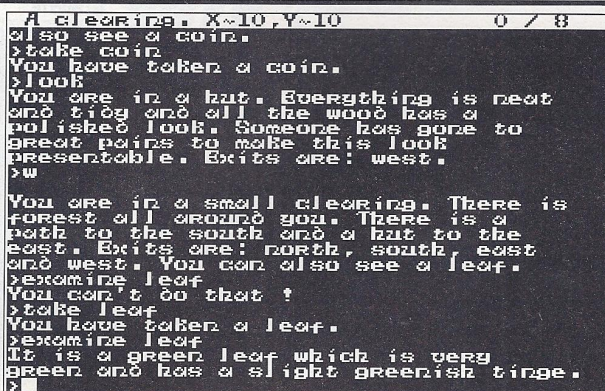
First choose what you are going to build and the vehicles you are going to use...

...and then position them on the planet surface, just in time to be decimated by the native population.

Lineno

Goodman • £1.95 • Any ST

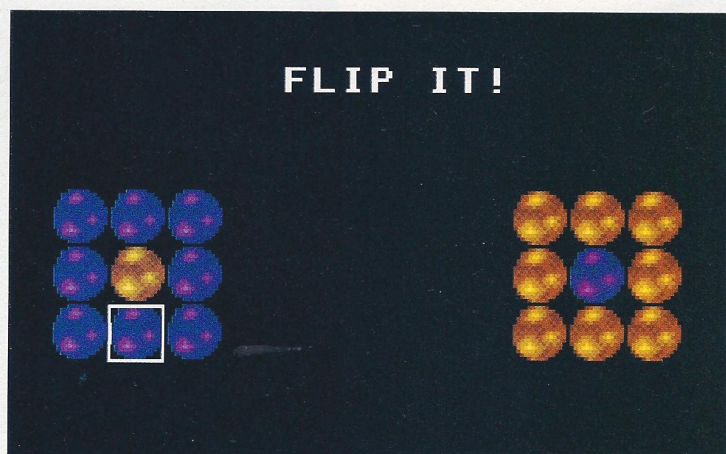
Much as we all love the latest generation of smooth-scrolling, glitzy games, you have to admit that there was something very special about early text adventures. Hitchhiker's Guide to the Galaxy seems to be almost extinct, but Lineno has a stab at recreating the Infocom magic. Having put forward a plot less feasible than Ace Ventura's hair-do – an incident involving an exploding chicken and some home made gravy, would you believe? – it's into the game itself. Shortly after starting you discover a "green leaf which is very green and also has a slight greenish tinge" and things just get wackier from here on in. However, your joy at actually finding a programmer with a sense of humour is tempered somewhat by the lack of gameplay – the brief location descriptions in particular, become annoying after a while.



With a plot like this, you've really got to expect wackiness, haven't you?

The location descriptions can become a bit dull after a while...

The (rather skinny) Plot
A long, long, long, long time ago in a place far, far, far, far away
in a vast, vast, vast, vast land, there was a participant in a rather
household name, the chicken you were eating, exploded. In your kitchen
the chicken exploded, and you were eating it. You exploded. You both
through the ceiling into a land filled with... called Bungee. We said
we had a great idea for the ten years required to bring you home.
Now, this is the demo version of the game. You will need to
register it for the full version. This only costs £2.95 so you're hardly
likely to die of starvation if you do. Upon registering it you will
receive some "hand" full documentation and a "hand" full of...
The Full Version includes:
18 characters to interact with
over 400 locations
a huge vocabulary
Numerous items to collect and use
-More-



Match left to right and you're heading for the next round...



Flip'em

Goodman • £1.95 • Any ST

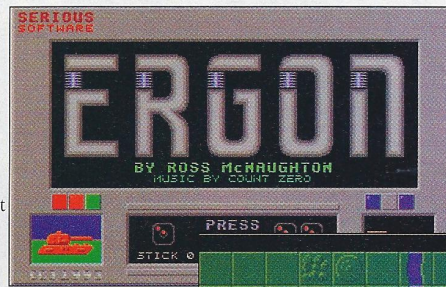
If Murphy's law reads "if anything can go wrong, it will", then the law governing ST shareware probably runs along the lines of: "the simpler a puzzle game looks, the harder it is to beat". Yes, Flip'em is an unashamed brain teaser and your mission (should you decide to accept it, Jim) is merely to fiddle with Grid A on the left of the screen until it matches Grid B on the right. Basically, you need to work out which tiles are inverted when you click on a certain square, and beating the thing really does take effort. Mind you, once the first puzzle is out of the way and you've got a grip on the inversion rules, it does get much easier. There are eight levels to play with, and while the graphics are more than acceptable there isn't any music to calm your nerves or ease the frustration. With a little extra effort, this could be turned into an exceptionally good game.

Ergon

Goodman • £1.95 • Any ST

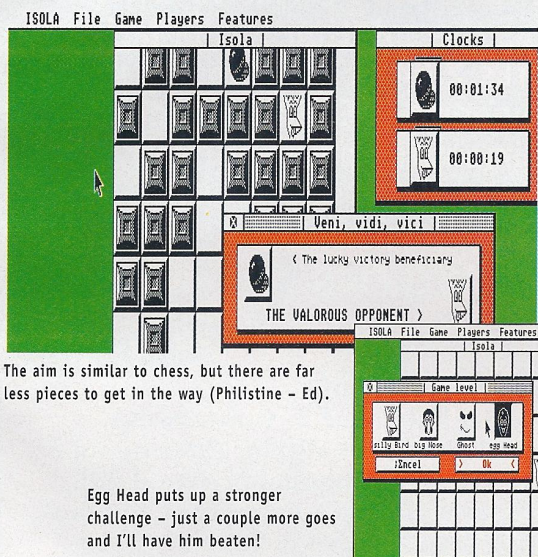
If Risk plays a big part in helping you to cope with the long, winter evenings then you really ought to invest in a copy of Ergon. It's a two-player strategy war game, the deep and meaningful aim being to wipe out the opposition's shiny red tanks before they get a chance to trample all over your shiny blue headquarters. A range of different vehicles are provided to help you to traverse the scenery and installations can be built to keep new tanks flowing onto the field. As with most games of this type, you are given a set number of moves per turn and your resources increase with the passage of time.

Graphically, you can't expect too much, but it's relaxing enough to play and less complex than most shareware war games. The only thing that really lets the experience down is the lack of a computer controlled opponent – if you're gonna find another human player anyway, you may as well just dig out a board game.



Move, build, blast –
who said war-
gaming was dull?

Each move nets
some extra
resources – you'll
need them to keep
your men well
equipped.



The aim is similar to chess, but there are far less pieces to get in the way (Philistine – Ed).

Egg Head puts up a stronger
challenge – just a couple more goes
and I'll have him beaten!

Isola

Floppyshop • £2.00 • Any ST

If you're in the mood for a strategy game, but can't quite face the thought of being thrashed by "Anatoly ST" at chess yet again then Isola will be right up your street. Play is split into two stages – the first is to drag your player to a new square on the thirty-six position board and you are then given the opportunity to place a blocker, the ultimate aim being to prevent your opponent from moving. If you are up against "Silly Bird", the least intelligent opponent, this really isn't too difficult, but "Egg Head" on the other hand always seems to be one move ahead. Even so, it probably won't be too long before you work out a strategy to outwit the ST – it's payback time!

The whole game sits comfortably beneath a GEM umbrella which will no doubt please purists, and ST Guide help is available to get you going. Mind you, the squeaky clean approach does lead to some rather dull graphics, even when running in Falcon screen modes.

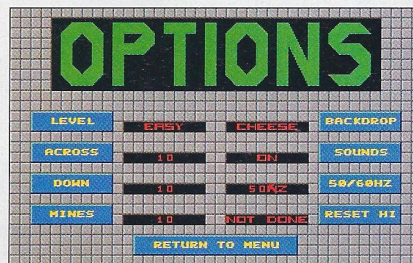


Manic Minefield

Floppyshop • £2.00 • Any ST

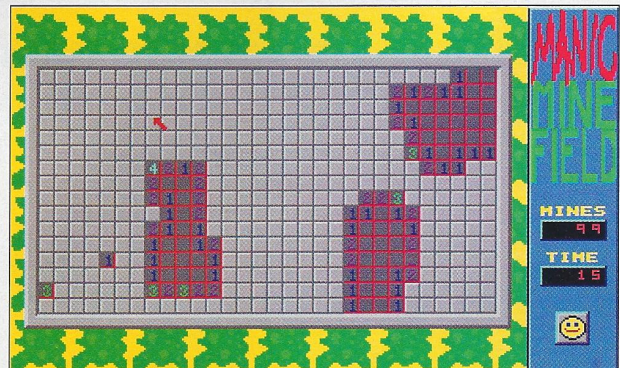
What better way to start 1996 than with a Minesweeper clone (number 2,435 if my memory serves me correctly)? Yet again, the sole aim of the game is to deduce the position of landmines on a large grid. Markers that litter the empty squares and show the number of adjacent mines are your only guide; no matter how practised you become, it's still possible to make silly mistakes. The skill level is adjustable to keep the game fresh and there's also a timer which acts as a primitive scoring system. There's nothing particularly new or exciting on offer, although the standard "grid size" and "number of mines" options are both present and correct.

Manic Minefield lacks the swish presentation of its peers – adjustable backgrounds being the only concession to sophistication – but it's got enough gameplay features to carry it through, and as the documentation points out, it runs on any ST no matter how humble. There remains just one thing to say however: come back Tetris, all is forgiven!



A fully sizable playfield goes some way towards making up for Manic Minefield's lacklustre presentation.

Just find the mines by using
the markers – looks tricky, but
you'll soon get the hang of it.



ATARI World

in conjunction with COMPO and HiSoft brings you

**TIMEWORKS
2.04**

Speedo GDOS

**TIMEWORKS 2
MANUALS**

**SCALEABLE FONTS
WITHIN TIMEWORKS**

THE FONT SOLUTION

**AN AID TO MASTERING
TIMEWORKS**

As soon as you use this months Atari World Readers Disks you will discover the amazing **Timeworks Publisher**. A great program except for one thing - its limited built in fonts.

The solution? **SPEEDO GDOS** and **Timeworks 2.04** exclusive to Atari World! Speedo GDOS was produced by Atari as the solution to the lack of fonts on the ST, TT and FALCON 030. Timeworks 2.04 is a previously unreleased version of Timeworks Publisher that supports SPEEDO GDOS and lets you specify font sizes from within the Timeworks program itself.

- ◆ Comes complete with 14 Bitstream Speedo fonts, 8 different styles some in different weights.
- ◆ Comprehensive range of printer drivers including all standard 9 pin dot matrix, 24 pin dot matrix, inkjet, laser and Atari SLM.
- ◆ Requires a minimum of 2MB of RAM and a hard disk.
- ◆ Timeworks 2.04 is fully WYSIWYG (What you see is what you get) on screen when using Speedo GDOS 4.0
- ◆ Easy to install - the easy to follow instructions in the install program and you will be up and running in minutes.

Timeworks 2 manual

GST, the producers of Timeworks Publisher 2, were always renowned for the quality of their manuals. The Timeworks 2 manual is a model of clarity and will help any user get the best from this great program. We have the original manual available for just £14.99.

The full manual for just £14.99

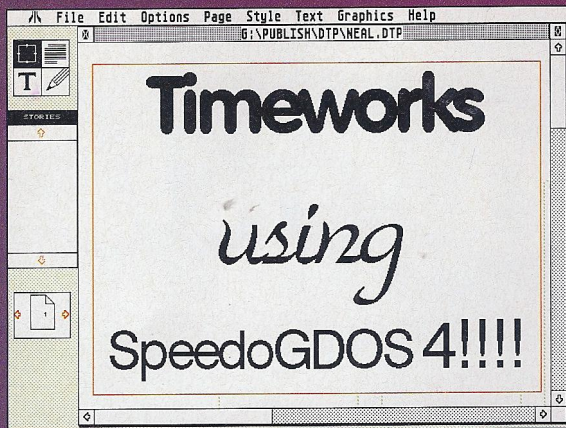
Get Speedo GDOS and Timeworks 2.04 for just £49.99. Save £50 when you also buy two font packs.

About fonts

The full version of Timeworks on the Atari World readers disks uses GDOS, the forerunner of Speedo GDOS. This means the fonts it uses are all bit map fonts, ie the font contains a collection of dots that go to make up each character. The fonts are therefore all fixed in size. For most DTP applications this is not very satisfactory. Whilst you can change the size of a bit map font using a font editor, the normal results mean a drop in

quality. Having created a new bit map font it can also be tricky to get Timeworks to recognise it. Speedo GDOS solves all this by using Speedo outline fonts. An outline font is a font that is stored as a collection of mathematical type expressions, ie lines, curves etc, not as a collection of dots. Speedo GDOS takes an outline font and generates a bit map font at any size you specify - subject of course to you having enough memory in your computer. Some outline fonts have hint information in them. Hint information is used to improve the quality of

fonts at smaller point sizes. This means that when you use a good quality original font you will get better quality at small point sizes than you would using an un-hinted font. The Speedo outline font format supported by Speedo GDOS has hints. However other outline font formats common on the ST such as Calamus fonts and Calligrapher fonts do not have hints. If you are using either of these programs you will see an improvement in output quality by switching to Timeworks 2.04 and Speedo GDOS.



Publisher 2 using Speedo GDOS Timeworks Publisher 2.04 and Speedo GDOS 4 in action!

Extra Speedo Fonts

There are two versions of SPEEDO GDOS that work with Timeworks 2.04, SPEEDO 4.2 and 5. You can choose which to buy if you don't already have a copy. However, any serious DTP user will soon want more variety. That report, menu, invitation, newsletter or advert can be easily livened up by a change of font. COMPO have two font packs with more than enough fonts to suit all but the most demanding Atari owner. Font Pack Office is designed for the designer producing documents typical to the office environment. It contains fonts ideal for reports, thesis, direct mail etc. Font Pack Gold is more for the 'designer DTP' type applications such as adverts and greeting cards. Both packs contain around 100 fonts each. The Office pack gives you a wider range of variants on the same font whereas the Gold pack contains more variety of font styles.

The number in brackets () gives the number of different styles of each particular font.

The fonts in the Office pack...

Futura (17)
Humanist Slabs 712 (4)
Blackletter (1)
Americana (4)
Bernhard Modern (4)
Caslon 540 (2)
Blippo (1)
Bernhard Bold Condensed (1)
Bernhard Tango (1)
BALLOON (3)
Bruce Old Style (2)
COPPERPLATE GOTHIC (5)
Bookman (2)
Caslon Openface (1)
Caslon Bold (2)
Futura Black (1)
Compacta (1)
Humanist 970 (2)
Humanist 521 ((11)
Aldine 721 (7)
Humanist 531 (3)
Bernhard Fashion (1)
Humanist 777 (7)
Caslon Old Face (3)
Aldine 401 (4)
Bitstream Amerigo (5)

The fonts in the Gold pack...

Amazona (1)
Impuls (1)
Bitstream Cooper (10)
American Text (1)
Brush 445 (1)
Egyptian 505 (3)
Zapf Calligraphic 801 (4)
Egyptian 710 (1)
English 157 (1)
Impress (1)
Poster Bodoni (2)
Kaufman (2)
Commercial Script (1)
Zapf Elliptical 711 (4)
UMBRA (1)
Cloister Open Face (1)
Goudy Heavyface (2)
Exotic 350 (3)
Zapf Humanist 601 (8)
MAXIMUS (1)
Goudy Handtooled (1)
Goudy Catalogue (1)
Hobo (1)
Wedding Text (1)
Freeform 721 (4)
Freeform 710 (1)
STENCIL (1)
University Roman (2)
INFORMAL OT1 (2)
SHOTGUN (2)
Candida (3)
Cloister Black (1)
BANK (2)
Vineta (1)
Broadway (1)
Goudy Old Style (1)
Liberty (1)
ENGRAVERS GOTHIC (1)
THUNDERBIRD
Park Avenue (1)
Bodoni (7)

Phone our
ORDER HOT LINE
01487 773543
9.30am to 7pm Mon - Fri,
10am to 5pm Sat

ATARI World

FONTASTIC OFFER!

TO: SPECIALIST MAGAZINES. PLEASE RUSH ME THE ITEM(S) INDICATED.

I ENCLOSE TOTAL PAYMENT OF £

PAYABLE BY: CHEQUE ☐ P.O. ☐ CREDIT CARD ☐

NAME: _____

ADDRESS: _____

POSTCODE: _____ TEL (DAY): _____

VISA/ACCESS/MASTERCARD/DELTA/SWITCH NUMBER:

EXPIRY DATE: _____ SWITCH ISSUE NO.: _____

SIGNATURE: _____

CREDIT CARD ORDER LINE - 01487 773582

OR FAX YOUR ORDER - 01487 890787



Now send this coupon to: SPECIALIST MAGAZINES LTD, UNIT 3
GREEN FARM, ABBOTS RIPTON, HUNTINGDON, PE17 2PF

IMPORTANT!

Paying by CHEQUE or POSTAL ORDER - please make payable to Specialist Magazines Ltd and write your cheque card guarantee number on the back. All prices are inclusive of postage & packing and VAT. Please allow 28 days for delivery from when we receive your order. For non-receipt of goods phone 01487 773582, Monday to Friday between 10am and 6pm.

ITEM	NORMALLY	SPECIAL	QTY	TOTAL
Timeworks Publisher 2 manual	New	14.99		
Timeworks 2.04	New	14.99		
Speedo GDOS 4 and Timeworks 2.04	New	49.99		
Speedo GDOS 4, Timeworks 2.04 and Font Pack Office	99.98	79.99		
Speedo GDOS 4, Timeworks 2.04 and Font Pack Gold	99.98	79.99		
Speedo GDOS 4, Timeworks 2.04, Font Pack Office and Gold	149.97	99.99		
Speedo GDOS 5 and Timeworks 2.04	New	59.99		
Speedo GDOS 5, Timeworks 2.04 and Font Pack Office	109.98	89.99		
Speedo GDOS 5, Timeworks 2.04 and Font Pack Gold	109.98	89.99		
Speedo GDOS 5, Timeworks 2.04, Font Pack Office and Gold	159.97	109.99		

All prices include VAT and carriage

TOTAL

Q&A

You send in the questions – our team of experts sets about solving them...

Email anyone?



Q I have owned my STFM now for approximately 5 years now, and the when the time came to move from home to university I realised that I would have to say goodbye to my Atari. Things were looking bad, but after a week at uni I discovered the world of the Internet and email. This was great as it enabled me to talk to my friends, who were by now scattered across the country, several times a day.

I am now a bit of an email addict, and I have been wondering if my Atari at home could send email on the same network as the PCs, Macs and Suns here at uni. I have never owned a modem so I don't know much about communications on the Atari. Please could you tell me what the essentials are and how much it would cost to send email and use the Internet as cheaply as possible?

Matthew Trowell, Reading University

A If you go through to our back issues department, you'll find the subject was covered in exhausting detail in AW9. In the meantime, the answer to your question is yes, no problem. Your STFM can hook up directly to the Internet via almost any standard modem. All you need is an Internet account with a provider like Demon or even CIX. These typically cost around £10 a month. Most modems are supplied with all the cables you need – just make sure you can get your Atari close enough to a phone socket.

The best Internet software is Oasis which handles newsgroups and email from a neat GEM interface. We're hoping to bring you a complete tutorial very soon, courtesy of the

authors. And that's a gentle reminder lads! If you want to browse the Web there's the STIK/CAB browser too – read Graeme Rutt's comms pages for more information.

In terms of cost, I was asked this at the show and I gave a rather vague answer off the top of my head. Having thought about it on the way home, I dug out my phone bills and realised I could easily work out what I was spending on each online service thanks to the Mercury billing system.

Over the last quarter I spent a total of 35 hours online to CIX, CompuServe and Pipex at a cost of almost £100 – about a quarter of my total telephone bill. As I have no local access and always use the London nodes, most of these hours are clocked up at weekends, when calls are at local rate, downloading large files and browsing the WWW. So if you simply want to access a few newsgroups and swap email messages, your bill would be nowhere near this high.

If you had a single Internet account with unlimited access you would expect to pay another £40 or so a quarter in online charges but it's my guess that you could easily restrict online time to an hour or so a week and with Mercury discounts, add about £30 a quarter to your telephone bill. If you find a local provider, it would be substantially less, of course. Considering the enjoyment you obviously get from it, I'd say it was well worth it. And if you fancy writing an account of how you do eventually get online and what the problems are, we'll pay those first quarter's bills for you!

Andrew Wright

If anyone else has done an analysis of online costs, why not write in and tell us?

TIP Making space

How do you install all the fonts available with Timeworks 2 onto floppy when you only have a limited space available?

Use the (now unsupported) shareware DCMAXTRK to find the maximum formattable size of disks for your drive. Then format to this number of tracks with 10 sectors, using Feopy3 with verify on or similar.

Install Timeworks onto these disks. Inspect the fonts extracted, load the INSTALL.TXT file into your word processor and comment out the relevant lines relating to your system setup for both screen and printer that have been successfully extracted. Rename your ASSIGN.SYS file so it won't get overwritten. Repeat until you think that all fonts have been extracted.

Inspect all the fonts extracted across all disks and see if there are printer fonts that do not seem to be matched to a screen font and vice versa. Add lines to the INSTALL.TXT file to attempt to get these missing files from the archive. This file is written with a syntax similar to C and you should be able to follow it with a little effort. In particular remove the two characters '""' from the beginning of line 33 so that it reads 'CHRS(9)ap a:\ukus.xop' thereby installing the hyphenation exceptions dictionary. I managed to get an extra 10 fonts this way!

Merge all the separate ASSIGN.SYS files and match the result to the fonts extracted into the GEMSYS folder to verify discrepancies. Amend in your word processor as necessary and save as ASCII. Buy Fontkit Plus 4.1 by Jeremy Hughes from the FaST Club, (anything above v3.4 will do) which comes with TRIMFONT as part of the package. Run TRIMFONT on all your fonts, combine them all onto one disk and put EXPAND.PRG from the same package into your Auto folder, followed by FASTPRNT.PRG to speed up printing.

TRIMFONT will compress your fonts up to 90 per cent (I have 8Mb compressed to 1.3Mb). EXPAND will decompress the fonts automatically, faster than the original fonts can be loaded from floppy! The Fontkit manual also tells you more about Timeworks new font format than Timeworks does, so it's well worth getting.

Note that TRIMFONT can be bought separately for a tenner, but it really isn't worth missing out on Fontkit, if only for its conversion modules from Signum, Macintosh, HP and Calamus, let alone the editing functions and rescaling options that allow you to convert laser fonts and change them to 9-pin or 24-pin fonts.

Harry Sideras

TIP Auto mated

Although the Atari Auto folder can be a very useful, it has two major limitations which often make it a pain to work with. The first is that only programs with the extension *.PRG will load from it. The second is that programs placed into the Auto folder run in the order they were copied in. This means that if you are running your 'main' application (eg a word processor) from the Auto folder and want to add a utility at a later date, you have to go through a lot of hassle to make sure all of the utilities run before the main program (or they will not load). However, there is a solution, using the ever friendly DESKTOP.INF or NEWDESK.INF file. Load the *.INF file into a text editor, and find the following line (it is the fourth one down):

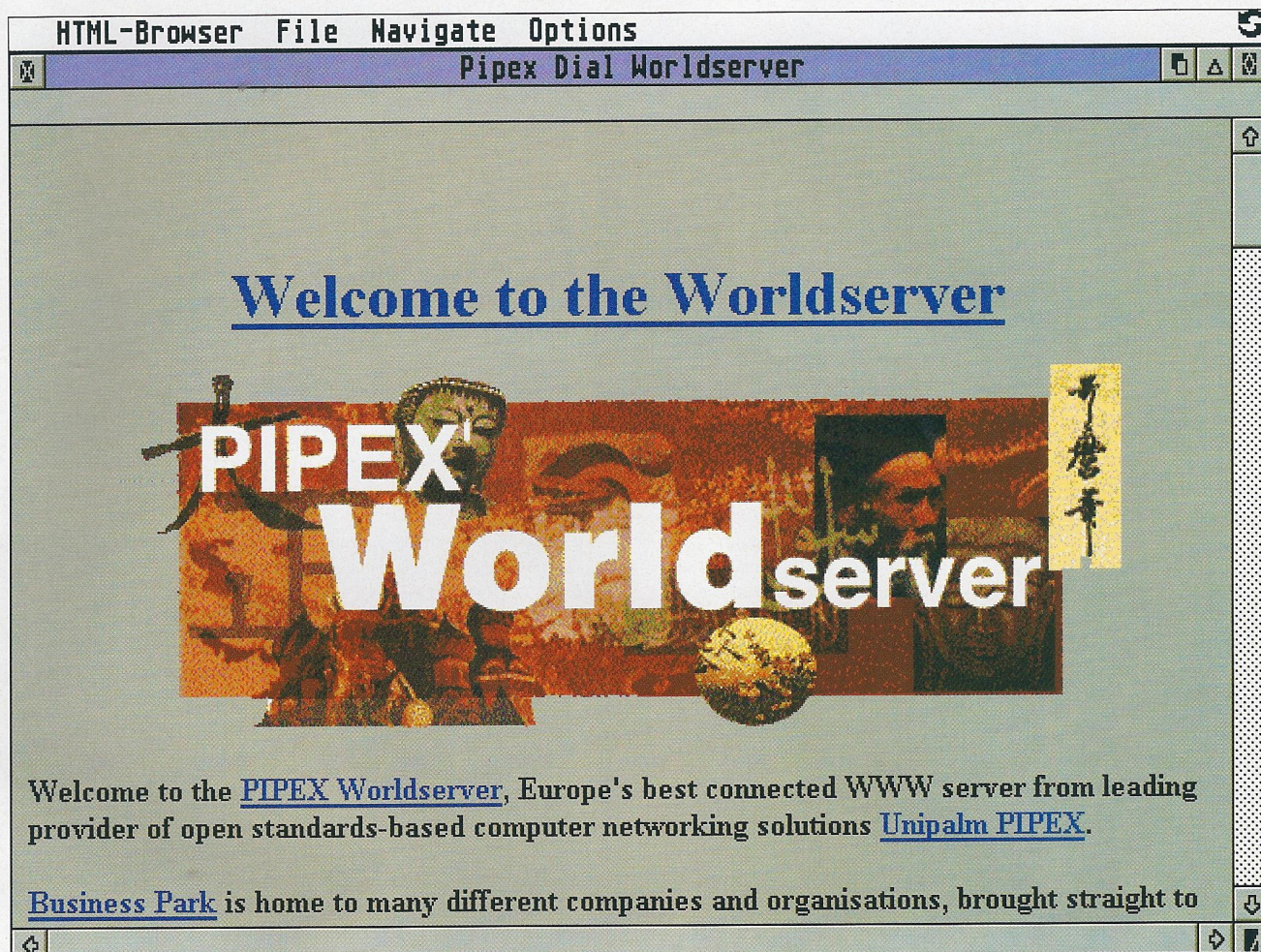
#d

Insert a line below this, putting "#Z 01" followed by the name of the program you want to autoboot, including the drive letter and directory in which it is located. End the line with a "@". The example here would load DPAINT.TOS in the folder called ART from drive A.

#Z 01 A:\ART\DPAINT.TOS@

Now you can autoboot programs with extensions other than *.PRG, and make alterations to the Auto folder without worrying about program order (as TOS looks at the *.INF file after the Auto folder). This method has the added bonus that it should auto-boot 'fussy' programs that insist on being in a particular folder.

Mike Keniger, Winchester



Remember Rockfall?



Q Please help me. I am recently retired and in a spare moment started fooling around with my son's ancient Atari 520ST. I found a game Rockfall which I find both fascinating and frustrating. Please if you know of any cheats and how to load them, for this game, could you forward them in the stamped addressed envelope enclosed. You would be making an old man very happy.

D J White, Wisbech

A Oddly enough I remember this game very well as I was responsible for launching it on the cover of Atari ST User magazine a few years ago. It went down extremely well but I'm not sure I remember seeing any cheats. Perhaps if a kind reader knows any different – or the author is still active in the Atari scene – they could get in touch?

Andrew Wright

65xE problems



Q I have recently bought an ATARI 65xE computer with a XC-1Z program cassette recorder. I have some cassettes, and games that plug in the back of the computer. I do not have a joystick for it. Could you supply one or is the model now obsolete, as I could not get one with the configuration shown below?



The computer does not have the channel switch mentioned in the manual. Would the picture quality be set automatically when plugged in to a colour TV? Also are educational cassettes still available to buy for this model? I would be most grateful for any information I can get, as the manual seems rather technical at times.

Thanking you for your attention.

P Elliott

A Sorry to disappoint you but all the Atari World team are TOS experts and all too young to remember the 65 xE! Perhaps one of the die hard Atarians out there can help?

Atari World

Timeworks tussles

Q Since sending away for the Timeworks 2 disk set on the promise of your July 95 issue (bought 11 Sept -p17: "Next month our reader disks bring you the complete Timeworks Publisher 2, the latest version... There have been revisions (to TW2) which allow you, among other things, to use SpeedoGDOS and so scalable fonts"), I have noticed, with some astonishment, rather major reported 'updates' to the same version of this program in a matter of months. My 'latest version' although installing and working seemingly normally cannot cope with NVDI 3 even in 'native' (GDOS) mode – the font display is a complete mess.

* August issue – (p42: "SpeedoGDOS

Access the Web with the HTML browser and STIK/CAB.

4 is the only font scaler on the Atari ST that works with Timeworks 2.04(?)")

* September issue – (p48: "Timeworks 2.04 is a previously unreleased version of Timeworks publisher that supports SpeedoGDOS... There are two versions of SpeedoGDOS that work with Timeworks 2.04: Speedo 4.2 and 5").

* October issue, bought yesterday – (p54: "The Atari World issue 4 reader disks brought you the sensational Timeworks, except for one thing – its limited built-in fonts. The solution: SpeedoGDOS and Timeworks 2.04 ... Timeworks 2.04 is an upgrade to the AW disk 4 release. You need to have both disk sets (??) to install Timeworks 2.04 ... Requires either SpeedoGDOS 4.0, 4.2, 5.0 or NVDI 3".

I think "buyers of the first hour" should now also be given the chance to upgrade to this latest (2.04c?) version with its NVDI 3 compatibility (and finally begin serious reading of some excellent tutorial material).

To this end, rather boldly

anticipating your concurrence, I have included £10, hoping this will also cover payment for your reader disk number 1.

Looking forward to receiving the above in due course, meanwhile wishing you and staff a very happy Christmas and prosperous New Year.

J Lambert, Australia

A We put out the original offer for Timeworks 2.04 after a lot of testing. At the time however we could not get it to work with either Speedo 5 or NVDI 3. After much further experimentation we finally got it working properly with first Speedo 5 and then NVDI 3.

I know that the magazine takes a while to reach Australia so you probably have not read many of the details we have recently published in issue 8 and 9 that help you to get the 'new' Timeworks 2.04 working with NVDI 3.

There is no great conspiracy going on here either – there is just one release of Timeworks 2.04 – the one that you have got.

Atari World

Happy



Q This is my first letter to any magazine,

but I feel it is necessary to say what a pleasant experience it has been coming into contact with the people using Atari computers. Everyone, virtually without exception, has been very friendly and helpful. Possibly this, amongst other influences, is what helping to keep the Atari alive despite the (reportedly) continued lack of support from the manufacturer. I like it. Whilst it is in their interests to be 'nice' to customers, Systems Solutions, Compo, The Upgrade Shop (Dave is a very helpful chap), Paul Rossiter, etc on the whole take much more concern than normal. Maybe it's the same in the PC world but I'm not going to bother finding out.

I'm quite new to computing,

Fancy earning a tenner?

All you have to do is send us a useful tip for your favourite program – what could be easier!

Send us your hint on a disk, saved as a text file (preferably), along with a screenshot for illustration, or possibly a drawing if it's a "you can build this" style tip. We'll pay £10 for every reader hint that we publish.

TIP Speccy print

I have recently upgraded my Spectrum Emulator up to version 2.7 and as I have a very useful program needing printer output, I decided to use the facilities included. I use a Canon BJ10X Bubble Jet printer connected to the Atari Centronics port. As no details are included in the documents I shall detail the methods used to achieve LPRINT, LLIST and SCREEN PRINT.

First load the emulator. In order to get the emulator to accept the necessary OPEN# command the Emulator Control Panel has to be accessed either by double clicking the left hand mouse button or pressing the INSERT key.

Click the mouse on Interface 1 button and Centronics Out button on the panel display and INSTALL. Back to the Spectrum screen and enter in program PRINTt. This opens a stream '3' to channel 't' and allows the LLIST and LPRINT to operate and text to be printed from the Spectrum to the printer. The program PRINTb opens a stream '3' to channel 'b' and allows full use of the printer commands.

Note both these programs use the CLOSE# command to close the stream after use. So normal printing routines are now possible however I could not get the COPY routine to function. In order to solve this the program PrintCPY was produced and this will satisfactorily produce a copy of the screen. It is however under emulator conditions and very, very slow!

However should a screen print be required then this will do the job. It will take a minute to get started and then you will have time to make coffee, dig the garden and service the car!

Note at the point in the program 'Enter title of screen to load' if you do not know the name, by pressing RETURN then the directory will appear and a suitable file can be selected.

These programs can be copied from disk to the Spectrum program folder and then by using the F2 key to rescane the directory they will be available for direct loading. These programs are given as a guide as to how to achieve printing from the emulator and if the methods are followed you'll be able to print successfully. If any Specci enthusiasts have a better and faster method of producing the Screen Print then please come forward.

John Bennett, Bedford.

Thanks for that, John. If anyone is interested, you will find the programs on this month's Reader disk.

having been given an Atari 520FM (Yes, really, single-sided disk drive and external power supplies) a year ago in August by my son-in-law. Under the influence of the final few issues of ST Review and your excellent magazine I have gradually upgraded my system and am now operating happily with an STe with 4Mb of RAM, a high resolution monitor and a 120Mb hard drive. Later this year, after I've panned the wife, I shall invest in an inkjet printer.... I only wanted to do my family tree!! Notwithstanding the apparent affluence, as a pensioner everything has to be done as cheaply as possible, all the mods... RAM and TOS upgrades, a printer buffer, relocated mouse port, monitor switch and (hopefully) a cartridge port extension have been (or will be) carried out by yours truly.

I visited the Atari show at Birmingham using my Senior Railcard to get there, of course, and bought

Kobold (only £30), the Atari World issue 4 cover disks and some bits from Best Electronics for my cartridge port project. Maybe shows were more *glitzy* in the past, I don't know, what you've never seen you'll never miss, but I thoroughly enjoyed myself. What amazing things were to be seen on Best electronics' stand. The crowd around System Solutions was unbelievable, but fortunately, for the lesser punters like me the first seminar started and the aforementioned crowd disappeared and in my anxiety to get to the front I'm sorry to say, Andrew, that I missed your seminar. I should have stayed longer, of course, I should have asked more questions, of course, but it wasn't possible. You'll have to do it all over again, real soon please. Pity that HiSoft were not there, please tell them of the great Atari opportunity they missed.

Why is a pensioner (pleading

poverty) running software like NVDI, Harlekin (used to produce this letter) and Kobold? Well, NVDI is like a high res monitor or a hard disk once you have used it you can only struggle along without it. Harlekin was a special offer by HiSoft and that doesn't only mean the price; the Harlekin editor is extremely flexible, readily accessible (a key click away when running any other program) and comes with lots of other good accessories.

Wearing my family history hat, I need to download (I think that's the right expression) lots of references to Parish Registers from the Latter Day Saints database in ASCII format and this includes lots of extraneous information that needs to be edited out or organised in comma delimited form. The Harlekin editor is just the job for this purpose. Kobold originally came from an ST Review cover disk and I tried it when I got my hard disk couple of months ago; it not only moves and copies files like lightning it defragments them in the process; I just had to buy it at the show price and now I can copy or move whole partitions at breathless speed. If you've a hard drive, Kobold is an essential file manager, whatever other hard drive software you may have.

When I got home from the show I rushed to the computer to install Kobold and Timeworks and found to my horror that one of the Timeworks disks was empty and the Kobold disk could not be read. I posted them off on Sunday and they were both back on Wednesday. Thanks *Atari World* and thanks System Solutions for promptly dealing with these problems.

Timeworks was initially installed to run with NVDI and whilst it appeared to be OK I have a feeling that it would be better with SpeedoGDOS... more expensive, so that will have to wait. In the meantime, I installed it with GDOS but the extra fonts were not found on completion; I am assuming that the additional fonts are on Disks F, G and H. I repeated the installation several times once with all Auto folder programs and all ACCs disabled but to no effect. Is there some way to de-archive these fonts without using the installation program?

Finally, I have a query relating to printers which has not been covered in magazines in my, albeit, limited experience and this concerns wide-carriage printers. I recently purchased an Epson FX1000 printer for the princely sum of £15 and it outperforms my Citizen 120D in terms of speed and matches it in all

other respects. Superbase and the Harlekin editor, when set with the right page width information, will use the wide printer to its full extent and the built-in self test is also OK. However, when using Timeworks, with GDOS installed, or EZTP Vector, with NVDI 3 installed, neither will use the full printer width. (Incidentally EZTP Vector bombs out when I try to print with NVDI v3.02 but is quite happy with v3.01). I've tried to landscape and portrait format with the proper page width settings but to no avail, I've also put the A3 sheets in the printer crossways and lengthways, in fact, all permutations without success. During these trials I discovered the delights of printing sideways by simply clicking on that little smiling face on the NVDI control panel CPX. On page 86, the Timeworks manual indicates that a 9-pin printer will only print in landscape with a wide carriage printer. So what am I not doing, or doing wrong? Perhaps one of the Atari Gurus could give an explanation on this aspect of printing.

I should say that in all other respects both DTP programs perform quite adequately for my needs, Timeworks is more stable than EZTP.

All the best to you in the new year and 'may ye lang reek'.

Ken Fowler

A You certainly have found the merits of top quality commercial utilities. Kobold and NVDI are found on the hard disk of most 'power user' Atarians – along with XBoot of course. People's opinion of Harlekin vary but I'm glad it works for you.

You are wrong about 'not getting the extra fonts' in Timeworks. Provided you select the correct button on the install program you do indeed have them.

When Timeworks installs it only extracts the files from the disk that you need. It would be fruitless installing fonts for a laser printer on your hard disk because you don't have a laser printer the fonts would never be used! Disks F G and H contain other fonts that might be of use in the future if you change printer again.

Your FX-1000 was a great buy at £15 (see our big feature article on printers). To print to the full width of the page on a wide carriage printer is normally possible subject to support from the software you are using. In your case there are two parts to the equation – NVDI and Timeworks. Printing landscape is a bit different.

To print full width (293mm) you

need to 'tell' both Timeworks and NVDI that the paper is 293mm wide. Then you can print a full carriage width which is particularly useful for printing A3 posters in portrait.

Your FX1000 printer is a 9 pin printer. This type of printer (compared to all other common printers such as a 24 pin matrix, inkjet or laser does not have the same resolution in the horizontal and vertical planes. In other words the number of dots that make up an inch on the paper horizontally is different to the number of dots that make up an inch in the vertical plane. Hence you would need a completely new set of printer fonts for Timeworks to achieve Landscape printing on a 9 pin printer. In practice hardly anybody bothers with landscape printing on a 9 pin dot matrix.

Oh, and I'm very interested in your 'cartridge port project'. Perhaps if it is a success you will share with us just what you are doing with your cartridge port?

Atari World

Deskjet dilemma



Q Re the letter titled All Change from Rob Gascoigne

in the January 1996 issue. I'm having the same problem with a Deskjet 540 which I use with a 4 Mb STe and Calamus 1.09. No matter what I try, it refuses to print the bottom 2 inches or so, I have tried printing an ASCII file as suggested and again it prints short indicating that the printer is set to an 11 inch page length but do not tell me to change a dip switch setting as there are not any on the 540 and I think you will find it the same on the 600 series they seem to be controlled by software. I am surprised you did not know this as you have reviewed the printers in the past year. In fact it was after reading the review and saving the money that I purchased the printer. So any solution to this problem would be appreciated not

only by me but all the others who have purchased a new Deskjet only to find they are cut short.

Don't bother contacting Hewlett Packard about this, if you don't own a PC they're as much good as an ashtray on a motorbike!

Jim Croft

A I too am not a fan of these 'switchless' printers unlike the Atari World reviewer! A printer can be controlled in one of two ways. Either by setting dip switches or by 'squirting' control codes at it. Anything that can be done with dip switches can also be done by 'squirting' control codes. All that control codes mean is a special sequence of characters sent to the printer which the printer 'understands' – see this month's ST Source for more details.

Ofir Gal covered how to do this in his article on HiSoft Basic in Issue 9. All you need is the information from HP on the commands to send. Since time immortal all printer manuals have had details of what control codes do what. However the HP540 manual that I saw did not! Trust HP to take away the information just at the time you really need it – the time they take away the dip switches!

All the PC software that HP supplies for the 540 does give you a pretty user interface onto a simple program that squirts these escape codes. Harangue HP until they give you this information for your 540.

Otherwise we will have to wait for an enterprising shareware/PD author to write a nice front end for the purpose – a CPX perhaps???

Atari World

Scan do



Q I would be grateful if you could help me re

scanners. I have a hand scanner but I would like to be able to scan A4 sheets of paper so that I can store

Send us your questions

Can't find anyone to answer that nagging question? Then drop us a line. Our team of experts are on hand to investigate and solve almost anything you can throw at them. Just send your letters to:

Atari World Q&A, Specialist Magazines Ltd, Unit 3 Green Farm, Abbots Ripton, Huntingdon, Cambridge PE17 2PF or e-mail them to:

atari_world@cix.compulink.co.uk

While every effort will be made to answer your question within the pages of Atari World, please note that individual correspondence cannot be entered into.



The new SyQuest 135s are doing well.

them on computer. I have a 520 STFM with 2.5Mb and am considering buying a hard drive from HiSoft. Do you know if page scanners exist for Ataris and where I could obtain one from? Many thanks in advance for any advice you could give me.

Chris Skinner

A Speak to System Solutions – they are the experts on A4 scanners!

Atari World

Easy 135?



Q The Syquest EZ135 3.5 floppy drive – well? Was it worth the wait? Gripped by

excitement when the news hit the Atari scene concerning the 100Mb Zip drive, closely followed by an announcement that Syquest were to exceed that with a little number called the EZ135 a 135Mb 3.5 inch floppy type disk drive, I felt that I couldn't do without one as a backup unit to save space on floppy disks.

Having read a review of both I opted for the Syquest and tried to place an order but the published deadline for availability could not be met until some eight weeks later and orders were refused until available.

Having placed an order, a further delay of around ten days was experienced due to the wrong power supplies being issued with the drive by the suppliers. My delivery date

was now imminent but passed without a delivery, due, I was informed, to the drive being unable to format the disks to the specified capacity. A further delay of nine days was experienced whilst Gasteiner Technology's engineers battled to restore the balance, located the error and rectified it on all their stocks before dispatching the drives. And yes it does work.

On receipt I unpacked the parcel to find an extremely well packed and protected compact drive unit measuring 8 inches long, 5 inches high, also a sturdy power supply (about the size of three packs of playing cards placed on top of each other) an envelope of PC software (3 HD disks) a connecting lead 50 to 25 way but for the Mac and a 50 way terminator plug and instructional manual. On ordering Gasteiner advised the purchase of a 50 way SCSI lead if I did not already have one and at a cost of £15 including VAT.

It had been a year and a half since setting up my previous purchase, a Fujitsu 260Mb SCSI drive from Compo and I could not access the Syquest when connected. After further study and discussion with Gasteiner and Compo, I found the drive ID and LUN and formatted it, the disk supplied already contained Mac installation software but that couldn't be accessed by the Atari. The disk formatted to 134.52 megabytes and automatically 5 partitions so I reformatted it as a single partition. The drive is extremely fast in operation.

The drive is cosmetically pleasing to look at and very compact containing the following facilities on the front. A disk door at the top which in size is equivalent to 3

floppies placed on top of each other and fractionally wider, just above the door is a small hole for pushing in a straightened paper clip to eject the disk should your home suffer a power failure. Immediately below the door is a small clear LED which flickers green and red when building up to speed (5 seconds) and during disk access and remains green when ready for use. Below this is a second slightly larger LED which is green 'power on' light. To the left of the access LED is a small square button which when pressed runs down the drive to enable you to remove the disk, activating a lever just under the disk door to assist in final ejection of the disk and which is used to lock the disk in place after insertion the disk can also be ejected by software means. The drive is silent when switched on and exceedingly quite in operation, the power supply gets only slightly warm if left on indefinitely.

On the rear of the unit is an ID control button and window to set the drive ID from 0 to 7, 2 standard SCSI connectors and an On/Off switch. By the colour of the drive a dark grey shot metal look finish, it is I believe, of rigid plastic construction and is quite light to hold.

Now to the cost, the drive cost £179 (£210.33 with VAT) and the lead cost £15. The guaranteed next day delivery charge of £10 was kindly refunded by Gasteiner because of the delays with power supply and technical problems. Gasteiner were extremely communicative and helpful and very obliging with after sales queries. The additional disks vary in price, my order for 5 cannot be fulfilled until the last week in

January at a cost of £14.25 each including VAT although I can get them from another source now, but at £18.20 including VAT. What a marvellous, space saving, good looking piece of equipment from helpful suppliers, which will allow me to back up both my hard drives on less than 3 disks at a very reasonable cost. Yes it was worth the wait. Now for the CD ROM drive I've always wanted. Who needs a PC!

Thanks to Compo for sound advice and for the ICD Software – I was grateful for your help, although I did not need to connect the drive alone first, it just needed formatting when ICD had showed me where it was. I have the Mega 4 (Plus 8 board from you) then Atari SLM804, the Megafile 60 connected to your Fujitsu, then the Syquest Connected to that, the terminator plug is not really required. I have Megafile as ID1 LUN0, FUJI as ID1 LUN0 and Syquest as ID2 LUN0. The SLM804 is ID 7 LUN as recommended by Atari.

Brian McNulty

A Sounds like our advice in previous issues of Atari World Q & A that the Zip drive might be the Betamax to Syquest's VHS could be right. However unlike VHS and Betamax when you compare the technical specifications Syquest is certainly better on paper too. Thanks for this mini review – it is great to hear positive feedback about purchases (we always seem to get more negative feedback) and I'm sure that your letter will inspire a few more Syquest sales.

The demand for these products has been so intense that we've been unable to get them for review!

Atari World

Help!



Q I am writing to ask your readers for help. I have recently been playing Monkey

Island on my Atari ST, having rediscovered my interest in the above machine. On reaching Monday Island in the game, I have discovered that Disk 4 is corrupt.

US Gold who originally produced the game have told me they no longer have any copies. So I was wondering if any of the readers out there could help me out by selling me a disk or disks (I am willing to purchase the whole game), as I am at my wits end. Please help and save my sanity. PS I love the magazine and have started reserving my copy every month.

R D Bird

A Anyone out there with Monkey Island? Seriously though there is an issue here. It saddens me greatly that someone in US Gold could not go to the trouble of copying you a disk. Whilst we are wholeheartedly against software piracy, I can't see anything morally wrong with another user supplying you a copy of Disk 4 of the software; so that you can get the program you legally acquired to work but which does not because of a disk fault that the original supplier can't rectify.

What's more I suspect very strongly that supplying such a disk on a not for profit basis is perfectly legal. This is a technicality in purchasing software that is on your side. Software usually comes with a license agreement – the small print. This usually says that you are not actually buying the software as such, what you are normally doing is buying a license to use the software. Provided you have such a license – which I think you have – the actual source of the software on disk is quite immaterial. You own a license to use it so if someone gives you the data on disk then that is perfectly reasonable and almost certainly totally legal. I am not a lawyer but although I do know quite a lot about software law, I can't therefore give you a definitive answer.

This case is obviously different to giving or selling a pirate copy of a piece of software to someone without a suitable license to use it. That is piracy.

As well as the fact that you hold the moral high ground and probably the legal one as well I also think in practical terms you and or someone else supplying you a copy of disk 4 have the practical grounds not to expect any comeback from any source. Any software company has enough problems with real cheats. No one at US Gold could be anything but happy to know that you had got your copy of Monkey Island going again. They would be absolutely barmy not to be.

Richard Barton

Each to his own...



Q Steve Bradshaw's letter describing the modification to the

Sony MPF 520 was a super piece of generously offered information. Unfortunately he did not specify the values of the resistor and capacitor used. I have tried a 1k resistor in series with a 100n ceramic capacitor on both my drives A and B with complete success. Many thanks for this particular fix-it!

However, Andrew Wright's recommended fix for the noisy Megafile 30 fan is not altogether clever – as he himself acknowledges. There are two better

solutions. The rather excellent – and since moved on – Keith from Compo once told me that a low value resistor of around 100 – 200 ohms (1 watt) wired in series would slow the fan down and reduce the noise to something more acceptable. Maybe so. Moreover this will only cost the princely sum of 10p!

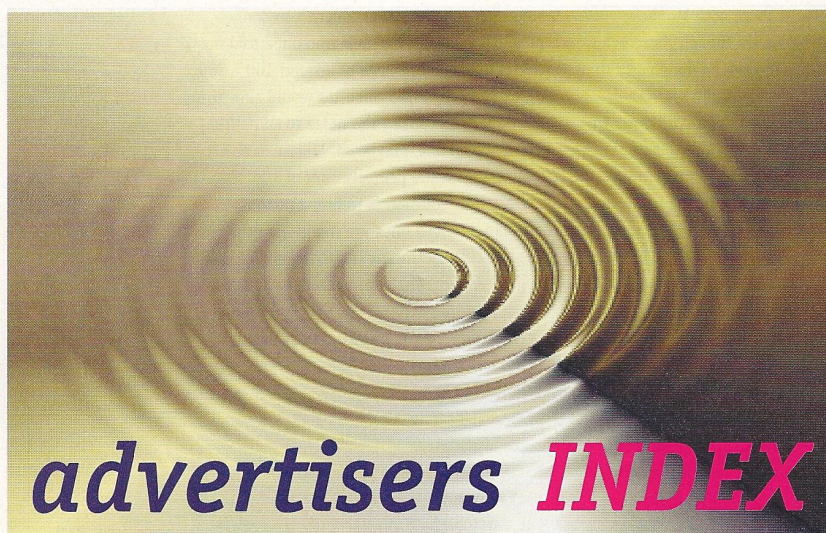
A better solution is to buy a completely new fan. Modern ones are much quieter. Greenweld Electronics supply some belting little numbers for the princely sum of £3.00 (Order reference number X6015). Two of these beauties are currently installed in my tower case – these disturb my Cubase-D activities not one iota – whilst a third operates virtually silently in the Megafile 30 at my work-place.

So Andrew, when your Megafile's PSU packs up through overheating and neglect, you can look back on this letter and realise that at least you gave everybody else the chance to avoid your own momentary inconvenience...

Richard Harrison, Halifax

A It's a pity you can't see a picture of me with my tongue out... That would be pretty appropriate. But thank you for your letter – it is of course the right thing to do (as opposed to the Wright thing to do) and makes a lot of sense. Interestingly enough your letter reminded me of the time when I visited Compo to pick up a Matrix Screeneye for review – I complained to the very same Keith about my noisy Falcon and he did some similar magic with his little soldering iron while I was waiting. Worth bearing in mind for anyone suffering noise problems.

Andrew Wright



Atari Workshop

2

Windsor Business Centre,
Vansittart Road, Windsor SL4 1SE
Tel: 01753 68909

Compo Software

30-33

Unit 3, Green Farm, Abbots
Ripton, Huntingdon, Cambs
PE17 2PF

Tel: 01487 773582

FAST Club

27

7 Musters Road, Nottingham
NG2 7PP

Tel: 0115 945 5250

Floppyshop

14, 36

P.O. Box 273, Aberdeen AB9 8SJ
Tel: 01224 312756

Gasteiner Technologies

42

126 Four Street, Upper Edmonton,
London N18 2XA

Tel: 0181 345 6000

Goodman PDL

73

16 Conrad Close, Meir Hay Estate,
Longton, Stoke-on-Trent ST3 1SW

Tel: 01782 335650

HiSoft

24, B/C

The Old School, Greenfield, Beds
MK45 5DE

Tel: 01525 718181

Ladbroke

Computing

22-23

33 Ormskirk Road, Preston,
Lancashire PR1 2QP

Tel: 01772 203166

LAPD

80

P.O. Box 2, Heanor, Derbyshire
DE75 7YP

Tel: 01773 761944

Merlin

34

P.O. Box 77, Stroud, Gloucester
GL6 9YD

Tel: 01452 770133

System Solutions

3, 61, 65

The Desktop Centre, 17-19
Blackwater Street, East Dulwich,
London SE22 8RS

Tel: 0181 693 1919

The Upgrade Shop

45, 48, 51

37 Crossall Street, Macclesfield,
Cheshire SK11 6QF

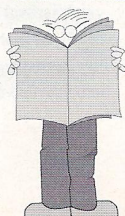
Tel: 01625 503448

Titan Designs

99

6 Witherford Way, Selly Oak,
Birmingham B29 4AX

Tel: 0121693 6669



ATARI World

Editor:

Andrew Wright

Art editor:

Ken Sims

Assistant art editor:

Keith Robbins

Technical editor:

Ofir Gal

Features editor:

Nial Grimes

PD editor:

Joe Connor

Contributors:

Mark Baines, Denesh Bhabuta,
Maurice Collins, Joe Connor, Ben Hall,
Steve Delaney, Jon Ellis, Iain Laskey,
Carl Löfgren, Günter Minnerup, Paul Rossiter,
Graeme Rutt, Shiuming Lai, Harry Sideras,
John Hetherington.

Photography:

Hannah Gal

Technical director:

Karl Brandt

Publisher:

Neal O'nions

All written enquiries to: Atari World,
Unit 3 Green Farm, Abbots Ripton,
Huntingdon, Cambs PE17 2PF

General Enquiries/Subs/Reader Disk orders:
Sarah Church. Tel: 01487 773543
Fax: 01480 773581

Scandinavian subscriptions:

Sven Bornemark. Tel: 040 545454

Reader Disk technical support: Joe Connor
Tel: 01206 852602 (Weds, 19.00 to 21.30)

Editorial Enquiries: Andrew Wright

Email: atari_world@cix.compulink.co.uk

Colour reproduction by Meridian House plc
Tel: 01733 312313

Printed by Goodhead Heatset
Tel: 01869 253322

World-wide distribution by SM Distribution
Tel: 0181 677 8111; Fax: 0181 664 6216

Atari World is published by Specialist
Magazines Ltd (Registered office: Salisbury
House, Station Road, Cambridge CB1 2LA)

No part of this publication may be
reproduced, stored in any form of retrieval
system or transmitted in any form by any
means, mechanical, electronic or otherwise
without the specific written consent of
Specialist Magazines Limited

All rights reserved including translation into
other languages

© 1995 Specialist Magazines Limited



Into '96 with TITAN Designs

Titan Designs are one of the longest established developers for the Atari computer. Starting in 1989 with the innovative Reflex Graphics Card, Titan Designs have gone on to produce or publish high-end products such as **APEX**, **Exposé**, **Thought!** and **BSS Debug**.

Anything Atari

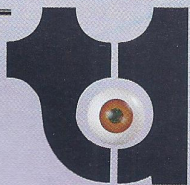
In addition we can source virtually any software or hardware item, including the new **SyQuest EZ135** removable disk drives, monitors, printers and memory (call for our pricing on 14MB Falcon upgrade!).

TITAN Media Racks

When you need a custom hard drive, the **TITAN Media Rack** is the perfect solution. A huge range of cases are available to suit every need, including 19" sub-rack systems. The Titan Media Racks can include hard drives up to 9GB (!), tape streamers, CD-ROM, SyQuest drives or anything related to storage.

For the very best in service and advice, there is only one answer.

TITAN Designs
AN **EYE** TO THE FUTURE



6 Witherford Way, Selly Oak
Birmingham B29 4AX
Tel: +44 (0)121-693 6669
Fax: +44 (0)121-414 1630

.....
e-mail: 100345.2350@
compuserve.com

*All photographic images on this page were
created using Exposé and APEX - no
retouching!*



What more can be said about APEX that hasn't been said before! APEX is the ultimate art & animation program for the Falcon, offering a massive armoury of tools to expand your creativity. Now with the introduction of APEX Intro, true-colour graphic design has never been more affordable. Both versions are supplied on two disks with a concise 248 page manual.



Exposé and APEX offer huge possibilities - live video digitised in 16-bit true colour up to 512x320. Create animations using the film capture mode within APEX. Three utilities are provided; FalCUBE, FalCAM and FalCAM Tripod. The 28-page manual also includes invaluable tips to achieve the best imagery.



Thought!

As the most innovative development tool for the Atari, Thought! offers massive potential to anyone developing anything on any Atari computer! The concept behind Thought! allows a simple and easy method to structure your thought processes.

BSS Debug

For the Falcon programmer, Black Scorpion's BSS Debug is an essential tool for developers. As you would expect from the leading Atari programmers, BSS Debug is fast, easy to use and full of features.

SyQuest EZ135

A superb new development from the brand leaders in removable media technology. The EZ-135 system offers performance at a low price and is worth considering for a first time hard drive, expandability to an existing system, or for high performance backing up.



EZ-135 Drive - £179 (+ VAT = £210.33)

135MB Cartridges - £12.75 (+ VAT = £14.98)

Falcon SCSI cable - £14.95 (+ VAT = 17.57)

50-way Centronics - £12.75 (+ VAT = £14.98)

Carriage - please add £8.51 (+ VAT = £10.00)

HP Printers

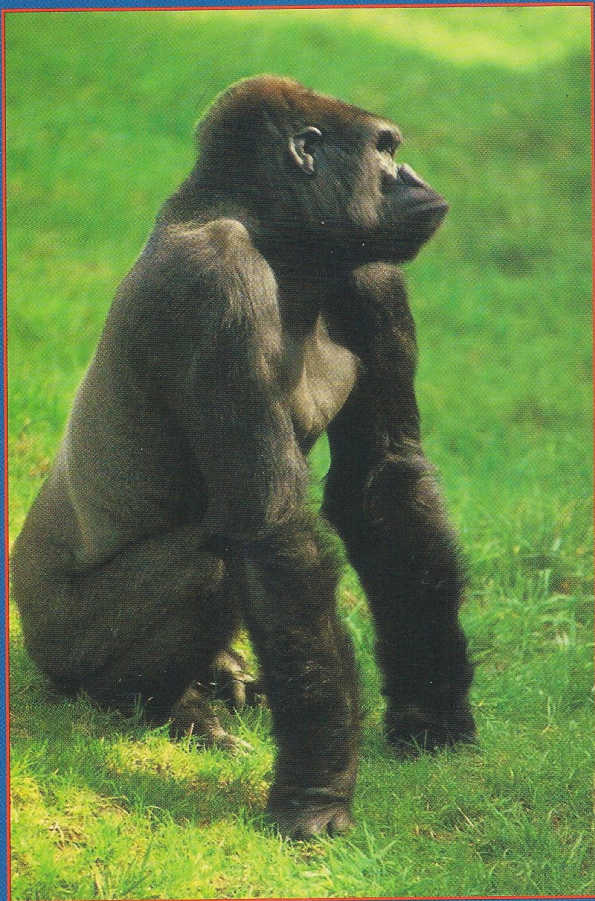
The renowned Hewlett Packard printers just get better. The HP850C colour printer achieves an incredible 300dpi with Colour Resolution Enhancement to produce virtual photographic quality. For lasers, HP are the world leaders and offer a great range to suit everyone. TITAN are Authorised HP Resellers.

Monitors

A massive range of quality branded monitors are available from TITAN - Hitachi, Mitac, AOC, Idek.
The best makes, the best quality,
the best prices.

Demo Disks

As one would expect from a company who offer the best service, demo disks are available for all products mentioned in the middle column. For pricing or more information on any product, call us now.



MIST THE SALE?

Our Christmas '95 sale was a stunning success and you *could* be sad that you missed it ... but there's no need to go ape with frustration - just like Sigourney's gorillas our offers *have* been rescued from extinction until the end of February '96.

From programming languages to real-time video digitisers, we have something that should appeal to any discerning Atari enthusiast who wants to get the most from his or her Atari computer.

To take advantage of these bargain buys just call us, free, on 0500 223660, armed with your credit/debit card details, or write to us enclosing a cheque or postal order. Please add £3 P&P to each order for delivery within the UK. We will despatch goods within 5 working days or, for only £6 postage and assuming the goods are in stock, we can get your bargain to you on the following working day. Please quote reference ATW96 when ordering.

SCSI

270Mb SCSI	£159
850Mb SCSI	£289
2x CD-ROM	£139
Zip Drive SCSI	£189
Link 2 SCSI	£65
Extends Pro	£29

All drives need a SCSI interface such as the ICD Link 2, unless you already have a suitable SCSI interface. You can chain up to 7 devices on one SCSI interface.

Languages

Lattice C Version 5.60	£69.95
HiSoft BASIC Version 2.10	£39.95
HiSoft Devpac Version 3.10	£39.95
HiSoft C Interpreter	£10
FirST BASIC with full manual	£10
Personal Pascal	£29.95
Devpac 3.10+BASIC 2.10+	
Lattice C 5.60 Bumper Pack	£139
The Atari Compendium Book	£30

Utilities

Diamond Back 3+	
Diamond Edge 2 Pack	£79.95
TruePaint	£12.95
TrueImage	£12.95
XBoot 3 + Saved Pack	£29.95
TrueImage +	
TruePaint Pack	£19.95
ProFlight	£10
MasterCAD	£5

Home Office

Productivity Bumper Pack (Papyrus Gold 3 + Twist 3 + NVDI 3)	£199
Papyrus Gold 3	£89.95
Twist 3	£79.95
Twist 2	£49.95
Atari Works	£59.95
Personal Finance Manager Plus	£10.00
Harlekin 3	£39.95
Superbase Professional 3	£39.95

Music/Video

Music MultiPack (StereoMaster, Quartet, Concerto)	£39.95
Replay16 16 bit Sampler	£89.95
VideoMaster ST+	
ColourMaster pack	£79.95
VideoMaster Falcon+	
ColourMaster pack	£99.95
ColourMaster RGB Splitter	£39.95
Replay Stereo 8 bit Sampler	£39.95

all offers subject to availability
and only valid until 29/02/96
© Copyright HiSoft 1995
E&OE.



HiSoft SYSTEMS

The Old School, Garsington Road,
Bedford MK45 5DE UK

Tel: +44 (0) 1525 778888

Fax: +44 (0) 1525 778888

Credit/Debit Card Orders 0500 223660

Just call Freecall 0500 223660, quoting your Access/Mastercard/Visa/Switch/Connect card number and expiry date and we will despatch the goods within 5 working days. Add £3 P&P within the UK. For an extra £6 we will despatch the day of order by ParcelForce 24 hour service.

<http://exxos.www.idnet.com/IMPULSE/atari/ast/>